

**Proceedings of the IUFRO Conference on
Silviculture and Improvement of Eucalypts**

**Anais da Conferência IUFRO sobre
Silvicultura e Melhoramento de Eucaliptos**

**Salvador, Brazil
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**v4: Environmental and social impacts of
eucalypt plantations
v4: Impactos sociais e ambientais de
plantações de eucalipto**

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Message

The importance of holding this Conference was first discussed in early 90's in a group of foresters and tree breeders representing private companies, research institutions and universities, in the realm of the "Eucalypt Project", coordinated by Embrapa-Florestas. Two colleagues provided a great incentive at that time: Chairman Rod Griffin and Co-Chairman Shinitiro Oda, from the Work Group S2.02.09 - Eucalypts Breeding and Improvement.

Seventeen years have passed since the last Conference held by this Work Group in Brazil. In this period eucalypt plantings in several countries, including Brazil, showed a significant progress: presently, cloning is used as routine in plantations for industrial purposes; the average productivity in those stands is over 40m³/ha.year; eucalypt wood replaced that of native species in sawmills; the discussion on social and environmental impacts of eucalypt plantations involve all sectors of the society.

Given this scenario, researchers, entrepreneurs and other professionals involved with eucalypt plantations are meeting in the city of Salvador, Bahia, in order to exchange ideas and information, present and discuss recent research results on silviculture and breeding of eucalypts that have been developed in a global context. It is expected that new discussions will indicate the pathways that eucalypt forestry should follow in near future, in ways to contribute, continually, to the well-being of man and to the conservation of the environment.

The Organizing Committee is honored to hand you the Proceedings of the IUFRO Conference on Silviculture and Improvement of Eucalypt. The 219 papers presented by representatives from 19 countries were arranged in four volumes: volume 1. Tree improvement strategies; volume 2. Biotechnology applied to genetic improvement of tree species; volume 3. Silviculture, productivity and utilization of eucalypt; volume 4. Environmental and social impacts of eucalypt plantations. Each volume includes invited and voluntary papers presented orally or as posters.

The Organizing Committee acknowledges the effort and dedication of all those who contributed to the realization of this Conference, especially the sponsoring institutions and those that provided us with valuable support in different ways.

Organizing Committee
August 24th, 1997

Mensagem

A importância da realização desta Conferência começou a ser discutida, no início da década, por um grupo de silvicultores e melhoristas florestais que representavam empresas privadas, instituições de pesquisa e universidades, no âmbito do "Projeto Eucalipto", coordenado pela Embrapa-Florestas. Dois grandes incentivadores naquela época foram o "Chairman" Rod Griffin e o "Co-Chairman" Shinitiro Oda, do Grupo de Trabalho S2.02.09 - Eucalypts Breeding and Improvement.

Dezessete anos se passaram desde a última Conferência realizada por aquele Grupo de Trabalho da IUFRO no Brasil. Neste período, a eucaliptocultura praticada em diversos países, inclusive no Brasil, apresentou progressos significativos: a clonagem é hoje usada de forma generalizada, em plantios para fins industriais; a produtividade média nessas florestas superou o nível de 40m³ por ha ano; a madeira do eucalipto começa a substituir a de espécies nativas nas serrarias; e a discussão dos impactos sócio-ambientais das plantações de eucaliptos envolve todos os segmentos da sociedade.

Pesquisadores, professores universitários, empresários e demais profissionais envolvidos com a eucaliptocultura estão se reunindo dentro desse cenário, na cidade de Salvador, Bahia, para intercâmbio de idéias e informações, apresentação e discussão de resultados recentes de pesquisa, em silvicultura e melhoramento genético de eucaliptos, que vem sendo desenvolvidos a nível mundial. Espera-se que os debates indiquem os rumos que a atividade florestal deva seguir em futuro próximo, de forma a continuar contribuindo para o bem estar do homem e a conservação do meio ambiente.

A Comissão Organizadora sente-se muito orgulhosa em entregar-lhe os Anais da Conferência IUFRO sobre Silvicultura e Melhoramento de Eucaliptos. Os 220 trabalhos, apresentados por representantes de 19 países, foram agrupados em quatro volumes: volume 1. Estratégias de melhoramento genético; volume 2. Biotecnologia aplicada ao melhoramento genético florestal; volume 3. Silvicultura, Produtividade e utilização de eucaliptos; volume 4. Impactos sociais e ambientais de plantações de eucalipto. Cada volume inclui os trabalhos convidados e voluntários, apresentados oralmente ou em forma de posters.

A Comissão Organizadora agradece o esforço e a dedicação de todos que contribuíram para a realização da Conferência, em especial às entidades patrocinadoras e as que apoiaram financeiramente.

Comissão Organizadora
24 de agosto de 1997

Índice

TRABALHOS CONVIDADOS

Certification and its implications for <i>Eucalyptus</i> production and trade Kiekens, J.P.	001
Indicadores hidrológicos do manejo sustentável de plantações de eucalipto <i>(Hydrological indicators of sustainable management of eucalypt plantations)</i> Lima, W. de P.	012

TRABALHOS VOLUNTÁRIOS

Alterações morfológicas, fisiológicas e partição de matéria seca em mudas de <i>Eucalyptus</i> spp submetidas a deficiência hídrica no solo <i>(Morphological, physiological, and partition alterations of dry material in cuttings of <i>Eucalypt</i> spp. subjected to soil water deficiencies)</i> Lima, P.C.; Barros, N.F. de; Reis, G.G. dos; Mosquim, P.R.	030
Alterações na absorção e distribuição de nutrientes minerais em plantas de <i>Eucalyptus</i> spp submetidas a deficiência hídrica no solo Lima, P.C.; Barros, N.F. de; Novais, R.F. de; Mosquim, P.R.	038
Alterações na produção e distribuição de açúcares solúveis e de amido em plantas de <i>Eucalyptus</i> spp submetidas ao déficit hídrico do solo <i>(Alterations in the productivity and distribution of soluble sugars and starch in plants of <i>Eucalypt</i> spp. subjected to soil water deficientes)</i> Lima, P.C.; Barros, N.F.; Mosquim, P.R.	046
Análise da influência da variabilidade hidrometeorológica interanual no crescimento de plantações de eucalipto <i>(Analysis of the influence of interannual hydrometeorological variability on the growth of eucalypt plantations)</i> Almeida, A.C. de; Soares, J.V.	052
Análise econômica de um programa do plantio de eucalipto na região de Wenceslau Braz, Estado do Paraná <i>(Economic analysis of an eucalypt plantation program in the Wenceslau Braz region, Parana State)</i> Rodigheri, H.R.; Ferreira Pinto, A.	062
Atmospheric inputs compared with nutrients removed by harvesting from <i>Eucalyptus</i> plantation. Implications for sustainability Poggiani, F.; Schumacher, M.V.	068
Avaliação econômica de povoamentos de eucalipto sob diferentes espaçamentos na região de cerrado de Minas Gerais, Brasil <i>(Economic evaluation of <i>Eucalypt</i> stands under various spacings in the cerrado region of Minas Gerais, Brazil.)</i> Contreras, C.E.; Reis, G.G. dos; Reis, M. das G.F.; Morais, E.J. de	075
Balanço hídrico de plantações de eucalipto a partir da estimativa de transpiração pelo método de Penman-Monteith <i>(Hydrological balance of <i>Eucalypt</i> plantations through transpiration by the method of Penman-Monteith)</i> Soares, J.V.; Almeida, A.C. de; Penchel, R.M.	080

Bird fauna and vegetation in natural woodlands and eucalyptus plantations in the high Andes in Bolivia - implications for development of sustainable agro-forestry techniques	
Hjarse, T.	089
Classificação ecológica para reflorestamento, do território brasileiro ao sul do paralelo 24°S - uma abordagem climática <i>(Ecological classification for the reforestation of Brazilian territory south of latitude 24°S - a climatic border)</i>	
Acosta, V.H.; Reis, M.G.F.; Reis, G.G. dos	095
Economic of <i>Eucalyptus</i> plantations: a case study in a tribal area in western India	
Balooni, K.	101
Estudio de impacto socio-económico del desarrollo del sub-sector forestal en Uruguay <i>(A socio-economic study of the development of the forestry subsector in Uruguay)</i>	
Basso, L.; Carrión, J.; Echeverría, R.; García, H.P. Juan, E.; Puppo, J.; Sancho, L.; San Román, D.; Tamosiunas, M.	107
Evaluation of 2,3,5 - triphenyltetrazolium chloride reduction as a measure of drought - and heat tolerance in <i>Eucalyptus grandis</i>	
Merwe, T. van der; Staden, L. van; Mescht, A. van der; Laurie, R.	112
Evaluation of chlorophyll fluorescence as a measure of drought tolerance in <i>Eucalyptus grandis</i>	
Mescht, A. van der; Ronde, K. de; Merwe, T. van der; Laurie, R.; Bester, C.; Wenzel, C.	117
Fluxo parcial de nitrogênio e de potássio em solo arenoso de cerrado, sob povoamentos de <i>Eucalyptus camaldulensis</i>, influenciado pelo modo de aplicação de adubo nitrogenado e potássico <i>(Partial flux of nitrogen and potassium in sandy soil of the cerrado in stands of <i>E. camaldulensis</i> influenced by the mode of application of nitrogen and potassium fertilizer)</i>	
Godinho, V. de P.C.; Barros, N.F. de; Pereira, P.R.G.; Sediyaama, C.S.	125
Forest situation in pakistan and planning its future	
Panhwar, F.	134
Ganhos econômicos com aplicações de nitrogênio, potássio e calcário dolomítico em povoamento de <i>Eucalyptus urophylla</i> S.T. Blake <i>(Economic gains of <i>E. urophylla</i> plantation with nitrogen, potassium and dolomitic lime application in a quartzpsamment soil)</i>	
Valeri, S.V.; Alvarenga, S.F.; Martins, M.I.E.G.; Banzato, D.A.	138
Identificação de características ambientais determinantes da capacidade produtiva de povoamentos de eucalipto	
Braga, F. de A.; Barros, N.F. de; Souza, A.L. de; Costa, L.M. da	142
Impactos de eucaliptais sobre vertebrados silvestres <i>(Impacts of eucalypt plantations on forest vertebrates)</i>	
Silva, E.	150
Irrigation increases growth and improves fibre quality of <i>Eucalyptus globulus</i> and <i>Eucalyptus nitens</i>	
Beadle, C.L.; Banham, P.W.; Worledge, D. Russell, S.L.; Hetherington, S.J.; Honeysett, J.L.; White, D.A.	154

Is there an association between the coolibah tree, <i>Eucalyptus victrix</i> L. Johns & K. Hill and the grass <i>Setaria dielsii</i> (Herrn)?	
Florentine, S.K.; Fox, J.E.D.	155
Measurement and prediction of nitrogen loss due to erosion of forest soils	
Teixeira, P.C.; Misra, R.K.	161
Meio ambiente e trabalho no mundo do eucalipto: um estudo de caso na bacia do Rio Piracicaba, em Minas Gerais	
<i>(Environment and work in the eucalypt world: a case study from the Piracicaba river region, in Minas Gerais, Brazil)</i>	
Guerra, C.B.	166
Morphological, physiological and anatomical adaptations to waterlogging by seedlings of <i>Eucalyptus victrix</i>	
Florentine, S.K.; Fox, J.E.D.	172
Nutritional monitoring as a strategy for recommending fertilization for yield maintenance in <i>Eucalyptus</i> stands at Votorantim Celulose e Papel S.A.	
<i>(Monitoramento nutricional como estratégia para recomendação de adubação para manutenção da produtividade em povoamentos de eucalipto da Votorantim Celulose e Papel S.A.)</i>	
Scatolini, F.M.; Corradini, L.; Barros, N.F. de; Valle, C.F. do	181
Otimização do estoque de madeira no campo em função do custo de transporte florestal	
<i>(Optimization of wood stock as function of the cost of forestry transportation)</i>	
Santos, S.L.M. dos; Monteiro, H.M.	184
Pattern of water extraction, water availability and growth in young <i>E. globulus</i> planted with different spacing	
Pacheco, C.A.; Tomé, M.; Delgado, J.; Silva, P.O.; Tomé, J.	188
Potencial hídrico e condutância estomática de <i>Eucalyptus camaldulensis</i>, <i>E. pellita</i> e <i>E. urophylla</i> no sudeste do Brasil	
<i>(Hydrological potencial and stomatal conductance of <i>Eucalyptus camaldulensis</i>, <i>E. pellita</i>, <i>E. urophylla</i> in Southeastern Brazil)</i>	
Reis, G.G.; Reis, M.G.F.; Gomes, R.T.; Silva, J.F.	196
Relações hídricas de <i>Eucalyptus camaldulensis</i> e <i>E. pellita</i> na região de cerrado	
<i>(Hydrological relationship of <i>Eucalyptus camaldulensis</i> and <i>E. pellita</i> in the cerrado region)</i>	
Leles, P.S. dos S.; Reis, G.G. dos; Reis, M. das G.F.; Morais, E.J. de	201
Responses to summer stress of carbon assimilation and photoprotection mechanisms in <i>Eucalyptus</i> L.	
Faria, T.; Silvério, D.; Breia, E.; Cabral, R.; Abadia, A.; Abadia, J.; Pereira, J.S.; Chaves, M.M.	207
Risk analysis of eucalyptus planting in south western France	
Burger-Leenhardt; Terreaux	208
The effects of commercial plantations of <i>Eucalyptus grandis</i> in growth on soils in areas influenced by volcanic ashes (Colombian Andes)	
Sicard, T.L.; Castilho, T.L.	214

The effects of elevated concentration of CO₂ on gas exchange of five commercially important eucalyptus species	
Lima, W.P.; Jarvis, P.G.	221
The sustainability of Eucalyptus commercial plantations: the congolese approach	
Bouillet, J.P.; Nizinski, G.; Nzila, J.D.; Ranger, J.	232
Water stress in seedlings of Eucalyptus camaldulensis clones and its effects on growth characteristics	
Lemcoff, J.H.; Garau, A.; Guarnaschelli, A.; Prystupa, P.	238

CERTIFICATION AND ITS IMPLICATIONS FOR *Eucalyptus* PRODUCTION AND TRADE

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SUMMARY

Since the late 1980s, certification has attracted increased attention in the international forestry debate. The paper reviews selected certification initiatives, particularly in light of their potential influence on the pulp and paper sector. The reviewed initiatives include the Forest Stewardship Council, ISO's standard for environmental management systems, the Canadian sustainable forestry standard and an alternative proposal - International Registration of Forests - as developed by the author. While certification is expected to progressively become a reality in some countries and on certain markets, the paper suggests that there are staggering difficulties with this approach, particularly when chain of custody verification is requested. It indicates that there remains considerable uncertainties regarding the future of certification and its production and trade implications. It also highlights the severe limitations of certification as an instrument to achieve sustainable forest management, particularly because certification does not address directly any of the major underlying causes of forest degradation and loss. Regarding clonal eucalyptus plantations, their agriculture like character is shown to pose a fundamental problem, i.e. whether or not they should be covered by forest certification. The paper indicates that most of the environmental impacts of plantations must be mitigated at an early stage and that they require other tools than certification: baseline studies and surveys, environmental impact assessments, etc. The paper suggests however that, once a plantation is established, certification can constitute a useful tool for ensuring its proper and continuously improved environmental management.

INTRODUCTION

The concept of labelling/certification of forest products emerged in 1988, following a study proposal by an environmental NGO - Friends of the Earth - in the context of the International Tropical Timber Organisation. It was clearly at the time a tropical timber issue. There were fears of reduced market access for tropical timber on markets such as Austria, Germany, the Netherlands and the UK, were environmental NGOs pressed for such timber to be boycotted.

Various national level responses to these boycott campaigns were initiated (Kiekens 1995 a&b): a compulsory labelling scheme and a special import duty in Austria; a "projekt tropenwald" in Germany with the definition of sustainable forestry criteria; a "tropical timber covenant" in the Netherlands between government, industry and NGOs, aimed at the importation of tropical timber from sustainable sources; an "accord" in the UK, between the Timber Trades Federation and WWF, followed by a "J995 Group" (see below).

The international debate regarding forests was not without implications on the labelling/certification debate. The Earth Summit and the renegotiation of the ITTA transformed forestry into a global issue. This was illustrated by a study carried out on certification for the ITTO in 1993, which applied to timber from tropical, boreal and temperate regions, although ITTA remained a tropical timber commodity agreement.

A major move occurred when WWF decided to push for its own certification scheme, instead of supporting intergovernmental work, particularly through the ITTO. The Forest Stewardship Council (FSC) was launched in 1993. It has a self-