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IUFRO Working Party 2.09.02:
Somatic Embryogenesis of Forest Trees Conference



Advances in Somatic Embryogenesis of Trees and Its Application for The Future Forests and Plantations

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Conference Program



Somatic embryogenesis of forest trees in Europe: what's going on? An overview

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Invited Oral presentation MA Lelu-Walter

Development of clonal propagation methods, such as somatic embryogenesis, has potentially numerous applications and advantages over conventional rooted cuttings (Klimaszewska *et al.* 2007). The speed at which a new material can be produced, the high potential of amplification make somatic embryogenesis a powerful and flexible tool for the release of improved varieties. Indeed, this efficient method of plant regeneration constitutes a tool for research (study of gene function) and for species improvement (production of a large number of genetically improved plants). Somatic embryogenesis can contribute to increase selection efficiency and facilitate deployment of improved varieties. Somatic embryogenesis has in many instances become the method of choice for clonal propagation of conifers (Sutton 2002). Its deployment is now achieved in Canada (CellFor, JD Irving), United States (Arborgen, Weyerhaeuser) where millions of emblings are routinely produced (*Picea* sp., *Pinus* sp., *Pseudotsuga menziesii*).

By comparison, it was interesting to make the point of advances made in Europe. Therefore, in the frame of the European project Treebreedex (<http://treebreedex.eu>), a review has been made on somatic embryogenesis in both Angiosperm and Gymnosperms forest tree species, results that will be presented today.

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