

## **Biosafety Workshop “15 years Tree Biosafety Research in Germany”**

Organiser: Matthias Fladung

Biosafety research on GM plants was initiated in the 1980s and has, thus, a long tradition in Germany. The first project on GM tree biosafety in Germany was funded by the EU and started in 1994 at the Institute of Forest Genetics, Grosshansdorf. The topic of the research was transgene stability. Following projects of the Institute of Forest Genetics, Grosshansdorf, funded by the German Ministry of Education and Research (BMBF) accompanied two field releases of GM trees in Germany. In the meanwhile, a large number of different biosafety-related projects performed at different scientific institutions in Germany (vTI Grosshansdorf and Waldsieversdorf, University of Tuebingen, University of Freiburg, University of Marburg) were also funded by the BMBF.

Eight talks presented at the biosafety workshop showed a representative overview of the biosafety research activities in Germany during the last 15 years. The introductory talk by Matthias Fladung summarized the topics of the different biosafety projects carried out by the Institute of Forest Genetics, Grosshansdorf. Hans Hönicka from the same institute in Grosshansdorf showed some results on the establishment of genetic containment in forest trees to prevent vertical gene transfer. Related to this topic, Ronald Bialozyt from the University of Marburg presented his research on genetic experiments and modeling to prevent transgene outcrossing in poplar. To analyse possible risks related to horizontal gene transfer, Uwe Nehls from the University of Bremen presented his collaborative work with the Institute of Forest Genetics, Grosshansdorf, on a possible horizontal gene transfer from trees to ectomycorrhizal fungi.

The next talk given by Axel Hinze from the University of Hamburg presented results on the functionality of bacterial and yeast recombination systems in the tree system poplar (in close cooperation with the Institute of Forest Genetics, Grosshansdorf) but also in wheat. In particular, he proposed some applications in tree biotechnology. Matthias Fladung, Institute of Forest Genetics, Grosshansdorf, summarized the current knowledge on transgene stability in forest trees. He proposed a general stable expression of the transgenes also in long-lived trees but showed also some examples of transgene instability.

The last two talks were of some general interest. Heike Mikschofsky from the University of Rostock presented ideas of future biosafety topics and showed the relevance of tight cooperation between researchers and workers active in gene technique law legislative administration. Finally, Klaus Minol from Genius, Darmstadt, introduced the internet website “[www//GMO-Safety.eu](http://www/GMO-Safety.eu)” providing a communication platform for biosafety research on GMO plants. This website also provides a free-of-charge download of information, slides and also videos dealing with GM plants produced worldwide.

*Matthias Fladung*