Preface

Since the first report on transgenic tobacco published in 1983, a large but diverse and fragmented body of knowledge on the environmental interactions and safety of transgenic plants and in particular trees has been acquired over the past more than 30 years. The main objective of the EU-COST Action FP0905 (Biosafety of forest transgenic trees: improving the scientific basis for safe tree development and implementation of EU policy directives) has been to evaluate and substantiate scientific data relevant to the biosafety of Genetically Modified Trees (GMT). Therefore, the idea of this book arises from the need to report the outcome of the scientific discussion and synthesis from the four years of activity of this COST Action.

COST—Cooperation in the field of Scientific and Technical Research—is one of the longest running European instruments supporting cooperation among scientists and researchers across Europe. COST is also the first and widest European intergovernmental network for coordination of nationally funded research activities. Therefore, this EU instrument has permitted the establishment of an unique platform on biosafety of GMTs like this COST Action is.

The Action started on April 12, 2010 and ended on April 11, 2014. In total, 27 COST countries (Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Israel, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovak Republic, Slovenia, Spain, Sweden, The Former Yugoslav Republic of Macedonia, and United Kingdom) and seven NON-COST countries (Albania, Australia, Canada, China, New Zealand, South Africa, USA) have participated in the Action.

To reach its objectives, the Action work plan organized into four Working Groups (WGs) focuses on: (i) the biological characterization of GMTs aiming to evaluate existing knowledge, including the experience from expert scientists actively working in the field of forest GMTs (WG 1), (ii) the assessment of possible environmental impacts and monitoring of GMTs in the whole production chain from plantation to final products (WG 2), (iii) the socio-economic implications and public acceptance and concerns of potential use of GM forest trees and R&D
investments in the framework of Cost–Benefit Analysis (WG 3), and (iv) increasing public awareness and understanding of GM tree plantations by providing science based information through management of the www.cost-action-fp0905.eu dynamic website (WG 4).

This book is subdivided into four sections each representing a WG, and the authors of the chapters are experts of the COST Action as well as colleagues in the field of GMT, all researchers and scientists with proven international reputation in the fields of tree biotechnology, risk assessment, monitoring, socio-economic, and dissemination.

The scientific outputs of this Action can be useful to bodies performing environmental risk assessment of GM plants (at European and local level but also at the worldwide level) and to authorities involved in risk management (e.g., commercial release authorization). Therefore, several end users will be interested in the content of this book, including public bodies (e.g., non-governmental organizations (NGOs) as well as organizations at regional and municipal levels) responsible for policy regulation at the scientific, ethic, and environmental levels, and private industries (e.g., paper, timber).

In particular, target groups are:

- Research organizations working with transgenic organisms and in related fields, such as ecology, biochemistry, physiology, economy, society, and policy
- Relevant national ministries responsible for GM plants
- European regional authorities (via relevant regional networks like AREPO—Association des Région Européenne des Produits d’Origine, GMO-free European Regions Network, CRPM—Conférence des Régions Périphériques Maritimes d’Europe, AER—Assembly of European Regions)
- European Commission services (particularly DG AGRI and DG ENV)
- GMO panel of the European Food Safety Authority (EFSA)
- Members of the European COEXNET initiative.

In summary, this book can be useful to public/private organizations as well as to research private and public bodies and universities worldwide since the status of GMT research and policy is reported at the world level.

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