Proceedings of the
COST Action E44 Conference

Broad Spectrum
Utilisation of Wood

Edited by
Alfred Teischinger and Joris Van Acker

in Co-operation:
COST - European Co-operation in the field of Scientific and Technical Research Action E44 - Wood Processing Strategy

June 14th - 15th 2005
BOKU Vienna, Austria
Contents

Session 1: Tree quality and processing

Scanning Techniques as Tools for Integration in the Wood Conversion Chain—Some Industrial Applications
Anders Grönlund, Stig Grundberg, Johan Oja, Jan Nyström 3

Alternative processing solutions for Red oak (Quercus rubra)
from converted forests in Flanders, Belgium
Dries Vansteenkiste, Lieven De Boever, Joris Van Acker 13

Specific wood and timber properties and competitive ability of
Nordic Scots pine in mechanical wood processing
Erkki Verkasalo, Mika Riekkinen, Måkan Lindström 27

Modelling of the sawn timber yield of beech log with regard
to the dimension and the red heartwood proportion
František Hapla, Denny Ohnesorge 39

WQI - a New Zealandisch lean, mean and hungry wood quality
initiative compared to Swedish initiatives
Olle Hagman 45

Session 2: Economic and consumer parameters

Consumers’ preferences to treated wood
Anders O. Nyrud, Anders Roos 55

Integrated production and marketing strategies in European sawmills
Hauke Chrestin 65

Interaction between R&D and business
Matti Kairi 75

Creating more added value for forest products
Nico A. Leek 87

Wood prices in post-socialistic economy
Władysław Strykowski 93
Session 3:  
Species and applications  

Possibilities of utilisation of small-sized coniferous wood in Bulgaria  
Julia Mihailova, Todor Todorov, Rosen Grigorov  

Poplar timber for light construction: non-uniform moisture distribution after kiln-drying  
Lieven De Roever, Dries Vansteenkiste, Joris Van Acker  

Stem analysis - the better look to intra-tree variability  
Michael Grabner, Rupert Wimmer  

Prospects for developing the production of solid wood products taking into account the wood base  
Neno Tritchkov, Petar Antov  

High quality beech glulam  
Jörg B. Ressel, Peter Becker  

Wood properties of larch grown on plantation vs. old-grown natural sites  
Rupert Wimmer, Michael Grabner, Burgi Gierlinger, Dominique Jacques, Luc Piques  

Advantages and disadvantages of mixed wood species utilization for wood based panels  
Sergej Medved  

Poster Session  

Grading standing trees based on stiffness by stress wave technique  
Ferenc Divos  

Glued laminated timber using “non traditional” species  
Gaetano Castro, F. Paganini  

Evolution of European poplar wood market  
Rossen Novakov, Patrick Mertens  

Innovation for Beech  
Christian Hansmann, Ute Selling, Robert Stingl  

Influence of compression wood on mill run of larch timber  
Marco Fioravanti, Giuseppina Di Giulio  

Modelling wood utilisation for mixed broadleaved stands in Hungary  
Sandor Molnar, Robert Nemeth, Szabolcs Koman, Jozsef Abraham  

Industrial Manufacturing of Wood Design  
Alfred Teischinger, Johannes Gelhart, Manfred Gronalt, Hans Häuslmayer, Margareta Patzelt