

IRG/WP 10-60286

(4 May 2010)

THE INTERNATIONAL RESEARCH GROUP ON WOOD PROTECTION

The 41st Annual Meeting of IRG

Programme

**IRG Secretariat
Box 5609
SE-114 86 Stockholm
Sweden
www.irg-wp.com**

MONDAY 10 MAY

Auditorium

08.30-09.30

Plenary session

President: Dr Gérard Deroubaix

Vice-President: Mr Jack Norton

Opening of the IRG 41st Annual Meeting

Dr Gérard Deroubaix, President of the IRG

Mr Georges Henri Florentin, Chairman of FCBA

Mr Pierre Bonfils, President of the Local Organizing Committee

Plenary

1. Opening of the meeting
2. Approval of the agenda (IRG/WP 10-60284)
3. Ratification of the election of new members since last year's Plenary
4. Announcement of the year 2010 Ron Cockcroft Award recipients
5. Approval of the Annual Report 2009 and Auditors' report (IRG/WP 10-60283)
6. Granting discharge for the Executive Council and Secretary-General from the administration and accountancy for 2009
7. IRG Strategic Statement and Framework
-Presentation by the VP Mr Jack Norton

MONDAY 10 MAY

Auditorium

09.30-10.30

Scientific Main Session

Chairman: Mr Jack Norton Co-chairs: Dr Laurie Cookson, Dr Michael Kennedy, Dr Radu Craciun, Prof Dr Andreas O Rapp, Dr Niels Morsing (acting)

Announcements concerning the IRG 41 Scientific Programme

J Norton & Section leaders (co-chairs)

IRG/WP 10-10714

Fungal Attack on Lignin and Cellulose: Elucidation of Brown- and White-Rot Mechanisms Comparing Biomimetic and In-Vivo Degradation Patterns

V Arantes, B Goodell, A M F Milagres, Yuhui Qian, T Filley, J Jellison, S Kelley

IRG/WP 10-20445

Toward an assessment of copper bioavailability in treated wood

J S Schilling, J J Inda

11.00-12.30

Scientific Main Session , cont'd

IRG/WP 10-30539

EVIPOL® and EVIPOL®10TK - Lab and field data on the efficacy of cyproconazole and its formulations

H Leithoff

IRG/WP 10-40505

Wood protection by means of electro osmotic pulsing technology (PLEOT)

A Treu, E Larnøy

IRG/WP 10-10732

New insights from NMR, FTIR, X-ray diffraction and physical chemistry into digestive processes in the wood-boring marine crustacean *Limnoria quadripunctata*

G P Malyon, S LaBarre, N Kervarec, P Carey, J McGeehan, X Xie, A Klüppel, S M Cragg

MONDAY 10 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
<p>13.30-15.00</p>		
<p>WP 1.5/2.5 Termites and other insects</p> <p>Chairs: Dr Magdalena Kutnik and Dr Berhan Ahmed</p>	<p>WP 4.5 Coatings, hydrophobic treatments and surface aspects</p> <p>Chair: Dr Laurence Podgorski</p>	<p>WP 1.3 Bluestain and moulds</p> <p>Chair: Dr Miha Humar</p>
<p>IRG/WP 10-10727 Estimating the age of subterranean termite attack and damage in buildings J R J French, B M Ahmed Shiday, J Thorpe</p> <p>IRG/WP 10-10709 Observations on colony collapse in Reticulitermes flavipes (Kollar) in laboratory and field settings in Wisconsin F Green III, R A Arango, G R Esenther</p> <p>IRG/WP 10-10726 Survey of termites in forests of Punjab: Pakistan F Manzoor, B M Ahmed Shiday, S Malik, A Rahim, B Habibpour, J R J French</p> <p>IRG/WP 10-10738 Termite taxonomy and distribution with particular reference to climate change in Africa P OY Nkunika, B M Ahmed Shiday, G W Sileshi, J R J French, P Nyeko, S Jain</p>	<p>IRG/WP 10-40526 Effect of Coatings on the Durability of Birch and Spruce Plywood. Part 1: Weathering Performance A Nurmi, H Viitanen</p> <p>IRG/WP 10-40527 Effect of Coatings on the Durability of Birch and Spruce Plywood. Part 2: Biological Durability A Nurmi, H Viitanen</p> <p>IRG/WP 10-40499 Comparison of colour change in wood clear-coating systems including inorganic and organic UV absorbers for exterior use Ö Özgenç, B Forsthuber, A Teischinger, C Hansmann</p> <p>IRG/WP 10-40504 Preliminary Observations of the Photostabilization of Wood Surfaces with Cerium Oxide Nanoparticles Chunling Liu, A Ahniyaz, P D Evans</p>	<p>IRG/WP 10-10730 Early detection of colonisation by blue stain and mould on modified wood using PCR technique A Steitz, B Schmöllerl, N Pfabigan, S Bollmus, G Grüll</p> <p>IRG/WP 10-20446 Onset of mould growth – the effect of climate variability and different geographic locations M Häglund, T Isaksson, S Thelandersson</p> <p>IRG/WP 10-50270 Effects of global climate change on mould growth - Interactions of concern L Ross Gobakken</p> <p>IRG/WP 10-20454 Drying Rates and Mold Growth on Various Building Materials under Different Environmental Conditions Dian-Qing Yang</p> <p>IRG/WP 10-20455 Mould growth on wood-based materials – a comparative study P Johansson, J Jermer</p>

MONDAY 10 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
15.30-17.30		
<p>WP 1.1 Physiology of decay</p> <p>Chair: Dr Sungmee Choi</p>	<p>WP 4.5 Coatings, hydrophobic treatments and surface aspects</p> <p>Chair: Dr Laurence Podgorski</p>	<p>WP 2.1 Prediction of service life</p> <p>Chair: Dr Christian Brischke (acting)</p>
<p>IRG/WP 10-10713 Protection mechanisms of modified wood against decay by white and brown rot fungi C Mai, P Verma, Yanjun Xie, J Dyckmans, H Militz</p> <p>IRG/WP 10-10718 Assessment of antagonism between lignicolous microorganisms: Research on possible use to preserve wood poles J-F Labrecque, A Zaremski, L Gastonguay, Y Prin</p> <p>IRG/WP 10-10733 Structural changes, basidiomycete richness, enzyme activity and proteomic profiling of decay resistant and non-resistant woods over 18 months in soil contact Youngmin Kang, S Diehl, L Prewitt, D Nicholas</p> <p>IRG/WP 10-10710 Modelling hyphal growth of the bio-incising fungus <i>Physisporinus vitreus</i> M Fuhr, C Stührk, F W M R Schwarze, M Schubert, H J Herrmann</p> <p>IRG/WP 10-10734 Postia placenta gene expression during growth in furfurylated wood G Alfredsen, C G Fossdal</p> <p>IRG/WP 10-10707 Sensitivity to Copper of Basidiospores from Copper Tolerant Fungi: <i>Fomitopsis palustris</i> and <i>Oligoporus placentus</i> C S Woo, P I Morris</p>	<p>IRG/WP 10-40510 Performance of selected types of coated and uncoated modified wood in artificial and natural weathering G Grüll, L Podgorski, M Truskaller, I Spitaler, V Georges, S Bollmus, A Steitz</p> <p>IRG/WP 10-40519 Impact of wood species on the performance of exterior wood coatings I De Windt, J Van den Bulcke, J Van Acker</p> <p>IRG/WP 10-30537 Distribution and availability of preservative components in ACQ treated wood - effects of coatings and weathering T Ung, M Nejad, P Cooper</p> <p>IRG/WP 10-20459 Finite Element Modelling of the Checking of Wood Exposed to Accelerated Weathering S G Ribarits, P D Evans</p> <p>IRG/WP 10-30524 Photostabilization of Wood with Higher Molecular Weight UV Absorbers P D Evans, M J Chowdhury</p> <p>IRG/WP 10-40492 Sorption properties of wood impregnated with aqueous solution of boric acid and montan wax emulsion B Lesar, M Humar</p> <p>IRG/WP 10-30550 Using plant oils as hydrophobic substances for wood protection D Panov, N Terziev, G Daniel</p>	<p>IRG/WP 10-20439 Service life prediction of wooden components – Part 1: Determination of dose-response functions for above ground decay C Brischke, A O Rapp</p> <p>IRG/WP 10-20440 Service life prediction of wooden components – Part 2: Impact of material, exposure and design details C Brischke, B Lauenstein, M Bilstein, T Bornemann, A O Rapp</p> <p>IRG/WP 10-20457 The biological durability approach for wood product performance and service life prediction J Van Acker, J Van den Bulcke, L De Boever</p> <p>IRG/WP 10-20458 Improved analysis of field test data related to service life prediction of tropical wood species J Van den Bulcke, A Wong, Ling Wang Choon, Yoon Soo Kim, J Van Acker</p> <p>IRG/WP 10-10725 Frequency of fungal decay in softwood windows in Germany D Lukowsky, O Moarcas, A Luette</p> <p>IRG/WP 10-20460 Service life prediction for exterior timber cladding E Suttie, F Englund</p>

TUESDAY 11 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
08.30-10.30		
<p>WP 1.1 Physiology of decay</p> <p>Chair: Dr Sungmee Choi</p>	<p>Joint Focused Meeting: COST Action IE0601 and WP 1.8</p> <p>Chairs: Dr Wibke Unger and Dr Thomas Nilsson</p>	<p>WP 3.3 Performance – field tests</p> <p>Chair: Dr Niels Morsing</p>
<p>IRG/WP 10-10720 A genomic sequencing approach to study wood decay and copper tolerance in the brown rot fungus, <i>Antrodia radiculosa</i> J D Tang, T Sonstegard, S Burgess, S V Diehl</p> <p>IRG/WP 10-10715 Microscopy evaluation of microbial decay patterns in wood stakes after 6 years in soil contact A Pilgård, C G Björdal</p> <p>IRG/WP 10-10721 Seasonal shifts of fungal community structure at the interface of treated or untreated wood and soil M Noll, I Stephan</p> <p>IRG/WP 10-10722 Effect of Heavy Metals on the Expression of Manganese Dependent Peroxidases of <i>Phanerochaete chrysosporium</i> – C Ibáñez, M Rabinovich, M Barraco, G Gecchetto, M Cerdeiras</p> <p>IRG/WP 10-10731 Chemical mediated depolymerization of cotton cellulose for the understanding of non-enzymatic fungal decay A C Steenkjær Hastrup, B Jensen, F Green III</p>	<p>IRG/WP 10-20441 Impact of climate change on wood deterioration - Challenges and solutions for cultural heritage and modern structures C Brischke, A O Rapp, M Hasan, R Despot</p> <p>IRG/WP 10-20433 The Use of Micro-Tensile Testing to Assess Weathering Decay and Oxidative Degradation of Wooden Items C Mai, Yanjun Xie, Zefang Xiao, P D Evans, H Militz</p> <p>IRG/WP 10-40535 Deterioration of wooden heritage in outdoor exposure in Romania L Bucşa, C Bucşa</p>	<p>IRG/WP 10-30544 Antifungal and wood preservative efficacy of IPBC is enhanced by α - aminoisobutyric acid P Bota, E Baines, A Mead, S C Watkinson</p> <p>IRG/WP 10-30549 Studies on Effect of pH on Copper Availability in Copper-Based Preservatives L Jin, P Walcheski, A F Preston</p> <p>IRG/WP 10-40507 Influence of Copper Preservative Type on Earlywood and Latewood Distribution of Copper in Treated Wood A Zahora</p> <p>IRG/WP 10-40515 A comparison of the corrosion of alkaline copper and micronized copper treated wood M Kofoed, J N R Ruddick</p>

TUESDAY 11 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
<p>11.00-12.30</p>		
<p>Section 5 Sustainability and environment</p> <p>Chair: Dr Niels Morsing (acting)</p>	<p>WP 1.8 Joint Focused Meeting: COST Action IE0601 and WP 1.8</p> <p>Chairs: Dr Wibke Unger and Dr Thomas Nilsson</p>	<p>WP 1.7 Natural durability</p> <p>Chair: Dr Rod Stirling (acting)</p>
<p>IRG/WP 10-50265 Copper distribution in soil leached from full scale decking boards during one year F G Evans</p> <p>IRG/WP 10-50266 Optimization of oxalic acid production for bioleaching of metal components from CCA-treated wood by an unknown <i>Polyporales</i> sp. KUC8959 Yong-Seok Choi, Min-Ji Kim, Jae-Jin Kim, Gyu-Hyeok Kim</p> <p>IRG/WP 10-50267 Microwave-Assisted Organic Acids Extraction of Chromate Copper Arsenate (CCA)-Treated Southern Pine Bin Yu, Chung Y Hse, T F Shupe</p> <p>IRG/WP 10-50272 Metal Migration from Douglas-fir Poles Treated with Ammoniacal Copper Zinc Arsenate According to Best Management Practices J J Morrell, C S Love, C Freitag</p>	<p>IRG/WP 10-40506 Ecological methods and products for wood protection used for restoration and conservation of built heritage cultural assets to increase natural durability and duration of exposure in open air museums M Pruna, D Purice, D Dumitru Copacean</p> <p>IRG/WP 10-40521 Degradations and conservation strategies for an XVIII-th century wooden church from Oltenia County, Romania G Niculescu, O Chachula, A Nicolaescu</p> <p>IRG/WP 10-20434 Stained wood: The identification of natural dyes and mordants in wooden works of art A Unger, W Unger</p>	<p>IRG/WP 10-10716 Influence of extractives on durability of <i>Cupressus lusitanica</i> heartwood A Mohareb, P Sirmah, L Desharnais, S Dumarçay, M Pétrissans, P Gérardin</p> <p>IRG/WP 10-10737 Natural durability of Mulberry wood from Iran A Se Golpayegani, M-F Thevenon, J Gril, K Pourtahmasi</p> <p>IRG/WP 10-10724 Natural Durability of Fence Poles from Fourteen Semi-Arid Land Species After Six-Month Exposition A Carrillo, F Garza, V Bustamante, S Sandoval, H Villalón</p> <p>IRG/WP 10-10723 Grading the Performance of 18 Common Bamboo Species Chen Lifang, Su Haitao, Zhang Yanjun, Wang Yuxia, He Xuexiang, Ma Hongxia and Xie Guijun</p>

TUESDAY 11 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
13.30-15.00		
<p>Section 5 Sustainability and environment</p> <p>Chair: Dr Niels Morsing (acting)</p>	<p>WP 1.8 Joint Focused Meeting: COST Action IE0601 and WP 1.8</p> <p>Chairs: Dr Wibke Unger and Dr Thomas Nilsson</p>	<p>WP 1.7 Natural durability</p> <p>Chair: Dr Rod Stirling (acting)</p>
<p>IRG/WP 10-50271 Riverbed Construction Technology using Thinned Timbers for Carbon Dioxide Sink in Korea Dong-heub Lee, Won-Joung Hwang</p> <p>IRG/WP 10-50273 Towards designing eco-friendly buildings with in-built termite protection J R J French, B M Ahmed Shiday, B Maggiolo, D Maggiolo</p> <p>IRG/WP 10-50274 Comparison of laboratory and semi-field tests for the estimation of leaching rates from treated wood – part 1: above ground (UC 3) N Morsing, M Klamer, B Seidel, J Wittenzellner, M Maier, J Habicht</p> <p>IRG/WP 10-30521 Comparison of Bifenthrin Formulations for Their Skin and Eye Irritation Potential Using the Pollen Tube Growth Test S Millward, P Lobb</p>	<p>IRG/WP 10-10728 Qualitative - Quantitative Analysis of Wood-Inhabiting Fungi in External Wooden Structures of the Latvian Cultural Heritage I Irbe, M Karadelev, B Andersons</p> <p>IRG/WP 10-40498 Reconstruction and Restoration of some Zagreb's Wooden Heritage buildings R Despot, M Hasan</p> <p>IRG/WP 10-30525 Use of Internal Remedial Treatment to Extend Wood Life at the Fort Vancouver National Historic Site C S Love, C Freitag, J J Morrell</p>	<p>IRG/WP 10-10729 Non-structural carbohydrates mobilization throughout the stem of <i>Tectona grandis</i>: A strategy for enhancing the wood natural durability B Florence Niamké, N Amusant, D Stien, A Amissa Adima, C Jay-Allemand</p> <p>IRG/WP 10-10743 Natural durability of African Paduk and Niove. Comparison of new trials and former data from CIRAD database Y N N'kolo Meze'e, N Lemenager, C Baudasse, M-F Thevenon</p> <p>IRG/WP 10-30552 Analysis of phenolic extractives from various Tunisian species trees -Study of its potential valorization I Oueslati, F Charrier, K Seffah, A Moubarik, N Ayed, A Zerizer, B Charrier</p>

TUESDAY 11 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
15.30-17.30		
<p>WP 2.2 Microbial test methodology</p> <p>Chair: Gry Alfredsen</p>	<p>WP 1.8 Joint Focused Meeting: COST Action IE0601 and WP 1.8</p> <p>Chairs: Dr Wibke Unger and Dr Thomas Nilsson</p>	<p>WP 4.4 Treating processes and treatability of timber</p> <p>Chair: Dr Radovan Despot</p>
<p>IRG/WP 10-20443 Profiling fungal community in wood decay ecosystem by Denaturing High-Performance Liquid Chromatography S Maurice, G Le Floch, M Le Bras-Quééré, J P Rioult, G Barbier</p> <p>IRG/WP 10-40520 Moisture dynamics of WPC as basis for biological durability N Defoirdt, J Van Acker, J Van den Bulcke</p> <p>IRG/WP 10-10735 Glutathione transferases as functional biomarkers of wood degradation? E Gelhayé, M Morel</p> <p>IRG/WP 10-20429 The Relative Performance of an Organic Preservative System under UC3A and UC3B Conditions using Two Test Methods C F Schauwecker, A Zahora, A F Preston</p> <p>IRG/WP 10-20453 Development of microbiological test methods for the wooden packaging of foodstuffs I Le Bayon, H Callot, M Kutnik, C Denis, A-M Revol-Junelles, J-B Millière, M Giraud, M Gabillé, N Passédát</p>	<p>IRG/WP 10-40487 Chemical protection of historic timber structures: Results and future needs M Kisternaya, V Kozlov</p> <p>IRG/WP 10-20431 Simulation and Investigation of Wood Degradation by Erosion Bacteria in Laboratory Experiments J Gelbrich, E I Kretschmar, N Lamersdorf, H Militz</p> <p>Final discussion</p>	<p>IRG/WP 10-40522 Biological degradation of acetylated wood after 18 years in ground contact and 10 years in marine water P Larsson-Brelid, M Westin</p> <p>IRG/WP 10-40485 The kinetics of catalytic acetylation of Pinus radiata (D. Don) using conventional and microwave heating A Kumar Sethy, P Vinden, G Torgovnikov, S Przewloka</p> <p>IRG/WP 10-20430 Third Party Quality Control and Laboratory Procedures in the United States C Barber, T Greer</p>

TUESDAY 11 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
15.30-17.30		
<p>WP 2.2 Microbial test methodology</p> <p>Chair: Gry Alfredsen</p>	<p>WP 1.8 Joint Focused Meeting: COST Action IE0601 and WP 1.8</p> <p>Chairs: Dr Wibke Unger and Dr Thomas Nilsson</p>	<p>WP 4.4 Treating processes and treatability of timber</p> <p>Chair: Dr Radovan Despot</p>
<p>IRG/WP 10-20443 Profiling fungal community in wood decay ecosystem by Denaturing High-Performance Liquid Chromatography S Maurice, G Le Floch, M Le Bras-Quéré, J P Riout, G Barbier</p> <p>IRG/WP 10-40520 Moisture dynamics of WPC as basis for biological durability N Defoirdt, J Van Acker, J Van den Bulcke</p> <p>IRG/WP 10-10735 Glutathione transferases as functional biomarkers of wood degradation? E Gelhaye, M Morel</p> <p>IRG/WP 10-20429 The Relative Performance of an Organic Preservative System under UC3A and UC3B Conditions using Two Test Methods C F Schauwecker, A Zahora, A F Preston</p> <p>IRG/WP 10-20453 Development of microbiological test methods for the wooden packaging of foodstuffs I Le Bayon, H Callot, M Kutnik, C Denis, A-M Revol-Junelles, J-B Millière, M Giraud, M Gabillé, N Passédat</p>	<p>IRG/WP 10-40487 Chemical protection of historic timber structures: Results and future needs M Kisternaya, V Kozlov</p> <p>IRG/WP 10-20431 Simulation and Investigation of Wood Degradation by Erosion Bacteria in Laboratory Experiments J Gelbrich, E I Kretschmar, N Lamersdorf, H Militz</p> <p>Final discussion</p>	<p>IRG/WP 10-40522 Biological degradation of acetylated wood after 18 years in ground contact and 10 years in marine water P Larsson-Brelid, M Westin</p> <p>IRG/WP 10-40485 The kinetics of catalytic acetylation of Pinus radiata (D. Don) using conventional and microwave heating A Kumar Sethy, P Vinden, G Torgovnikov, S Przewloka</p> <p>IRG/WP 10-20430 Third Party Quality Control and Laboratory Procedures in the United States C Barber, T Greer</p>

TUESDAY 11 MAY

17.30-18.30

Room: Coffee/tea break area

Poster session

IRG/WP 10-10719

Control of *Reticulitermes grassei* as a pest in Spain: Termite distribution in an urban area

E Alcaide, R Molero, J Diz, M Gaju

IRG/WP 10-10739

Towards Understanding the Biology of Wood Decay

J Tang, K Jenkins, L Parker, S V Diehl

IRG/WP 10-10744

Estimation of foraging territories of *Microcerotermes diversus* Silvestri (Isoptera: Termitidae) in Ahwaz (Iran)

B Habibpour, F Kocheili, M Ekhtelat

IRG/WP 10-20437

Diagnosis of failures in wood beams from historical house in Banská Štiavnica – Relations between ultrasonic measurements and bending properties

L Reinprecht, M Pánek

IRG/WP 10-20452

Accreditation: mutual benefits for research and industry

L Martin, N Leménager, C Baudassé, M-F Thévenon

IRG/WP 10-30530

Evaluation of ACQ-D treated Chinese fir and Mongolian Scots pine with different post-treatments after 20 months of exposure

Lili Yu, Jinzhen Cao, Wei Gao, Haitao Su

IRG/WP 10-30542

Application of Nanotechnology in Wood Preservation

M Akhtari, M Arefkhani

IRG/WP 10-30553

Laboratory study of fipronil baits against *Reticulitermes grassei* (Isoptera: Rhinotermitidae)

M Gaju, L Moyano, E Alcaide, C Patiño, J Diz, L Nunes, C Bach, R Molero

IRG/WP 10-40488

Repairing of wooden elements by beta-method using carbon, steel or beech rods

L Reinprecht

IRG/WP 10-40517

Study of Microscopy Properties of Modified Wood During Weathering Process

M Akhtari

IRG/WP 10-40533

Effect of Nano-Silver Treatment on Densified Wood Properties. Part One: Swelling, Recovery Set, Bending Strength

G Rassam, H Reza Taghiyari, B Jamnani, M Ali Khaje

IRG/WP 10-40536

Comparative Study of Heat Treatment of Beech Wood in Hot Water and Steam Medium

A Talaei, K Yaghoobi, A N Karimi

Liquefaction of Norway spruce (*Picea abies*) bark and its application for the development of chemical modification treatments to increase wood durability

X Duret, E Fredon, E Masson, P Gérardin

Molecular Techniques for Determining Basidiomycete Species Richness on Preservative-Treated Wood in Soil Contact: A Comparative Study

K Jenkins, L Mangum, L Parker, T Schultz, S V Diehl

Crossing Cracks in Concrete Slabs: What is the potential risk of an infestation by subterranean termites ?

M Kutnik, D Ansard, I Paulmier, M Jequel

Durability of Woodflour-Plastic Composites used in Japanese Market - water resistance and decay resistance by soil-buried test

M Kiguchi, Y Kataoka, H Matsunaga, Y Ohtomo

From wood protection to preservation of historic monuments: the commitment of Janssen PMP to cultural heritage conservation

J Bosselaers

Testing procedures for selection of new pinewood preservation products

B Nevado, R Diaz, J Santos, O Anjos, M Pestana, H Machado

PIBOLEO project: Eco Innovative process for multi-functional bi-oleothermal treatment for wood preservation and fire proofing

F Simon, M Kutnik, M-F Thévenon, C Alfos, S Warren

Regulation of Oxalic Acid Production by *Postia placenta* in Liquid Media

J Jellison, B Carlson

DNA microarray based on arrayed ligation reaction as a reliable tool for diagnosis of building rot fungi

N Rangno, K Jacobs, W Scheiding, B Weiss, D Müller, C Hiller, D Tusche, W Brabetz

WEDNESDAY 12 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
08.30-10.30		
<p>WP 4.3 Wood Composites and WPC</p> <p>Chair: Dr W Ramsay Smith (acting)</p>	<p>WP 3.4 Performance - field tests</p> <p>Chair: Dr Niels Morsing</p>	<p>WP 2.2 Microbial test methodology</p> <p>Chair: Dr Gry Alfredsen</p>
<p>IRG/WP 10-40490 Fungal decay resistance and mechanical properties of plywood panels made from maritime pine (<i>Pinus pinaster</i>) and bonded with cornstarch-quebracho tannin-phenol formaldehyde adhesive F Charrier, A Moubarik, A Allal, A Pizzi, B Charrier</p> <p>IRG/WP 10-40493 Decay and termite resistance of particleboard and MDF panels made from pinecones C Köse, E Terzi, Ü Büyüksarı, E Avcı, N Ayrılmış, S Nami Kartal, Y Imamura</p> <p>IRG/WP 10-40500 The utilization of sand dusts of MDF panel as filler in wood plastic composites A D Cavdar, H Kalaycioglu, F Mengeloglu, K Karakus, H Yel</p> <p>IRG/WP 10-40529 Lignin blocking effects on weathering process of wood plastic composites P Darabi, A Naghi karimi, S Ahmade Mirshokraie, M-F Thévenon</p> <p>IRG/WP 10-40534 Biological resistance of acetylated particleboards exposed to white (<i>Trametes versicolor</i>) and brown (<i>Coniophora puteana</i>) rot fungi M Ghorbani kokandeh, K Doosthoseini, A N Karimi, B Mohebyy, H Asghari</p>	<p>IRG/WP 10-20427 Glued laminated poles - Progress report after 30 years' testing Ö Bergman, J Jermer</p> <p>IRG/WP 10-30534 Mobility of Copper from MCQ in Shell-Treated Wood Exposed Above Ground R Stirling, P I Morris</p> <p>IRG/WP 10-30548 Field trials of wood preservatives in UC3 retention. Part 1. Durability results after 13 years in and above ground M Westin, J Jermer, M-L Edlund, P Larsson Brelid, I Johansson</p> <p>IRG/WP 10-30551 Accelerated L-joint performance testing of organosilicon treated wood L De Vetter, J Van Acker</p> <p>IRG/WP 10-10742 The effect of soil on the pH of untreated southern pine in ground contact C Vidrine, C Schauwecker, L Jin, A F Preston</p> <p>IRG/WP 10-40486 Evaluation of formulation type on the efficacy of bifenthrin as a glueline termiticide for veneer based wood products P Lobb, A Siraa</p>	<p>IRG/WP 10-20435 Detection of Wood Destroying Fungi Using DNA Microarray Technology K Jacobs, N Rangno, W Scheiding, B Weiss, D Müller, C Hiller, W Brabetz</p> <p>IRG/WP 10-20428 Measurements of rot fungal activity as a function of moisture content by isothermal calorimetry L Wadsö, A Pilgård, G Alfredsen</p> <p>IRG/WP 10-20432 Methods for Studying Penetration Depth of Wood Protection Products K Hansen, L Sites, D D Nicholas</p> <p>IRG/WP 10-20450 DNA-based tools for rapidly detecting, quantifying and monitoring ophiostomatoid fungi on beetles, in trees and wood products L Khadempour, Young Woon Lim, S Massoumi Alamouti, C Breuil</p> <p>IRG/WP 10-20438 Analyzing hyphal growth of the bio incising fungus <i>Physisporinus vitreus</i> with light-, confocal laser scanning- and, Synchrotron X-ray tomographic microscopy C Stührk, M Fuhr, M Schubert, F W M R Schwarze</p>

WEDNESDAY 12 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
11.00-12.00		
<p>WP 4.3 Wood Composites and WPC</p> <p>Chair: Dr W Ramsay Smith (acting)</p>	<p>WP 1.6 Marine</p> <p>Chair: Dr Simon Cragg (acting)</p>	<p>WP 1.5/2.5 Termites and other insects</p> <p>Chairs: Dr Magdalena Kutnik and Dr Berhan Ahmed</p>
<p>IRG/WP 10-40495 Extruded wood plastic composites based on ACQ and MCQ-treated wood materials Qinglin Wu, Fei Yao, K Ragon, J Curole, M Voitier, T Shupe</p> <p>IRG/WP 10-40497 Influence addition of boron compounds to adhesives on the bonding quality and fungicidal properties of glued wood M Humar, B Lesar, A Ugovsek, M Kariz, P Kralj, M Šernek</p> <p>IRG/WP 10-30536 The Effects of Some Fire Retardant Chemicals on the Decay Resistance of Medium Density Fiberboard (MDF) D Ustaömer, M Usta, Ü C Yildiz, S Yildiz, E D Tomak</p>	<p>IRG/WP 10-10711 Assessment of the marine borer resistance and abrasion resistance of lesser known hardwood timber species for use in marine construction J R Williams, G S Sawyer, G Malyon, S M Cragg, J D Icely, J Simm, M Meaden</p> <p>IRG/WP 10-10741 Fouling and Boring Organisms Deteriorating Various European and Tropical Woods at Turkish Seas S Şen, H Sivrikaya, M Yalcin, A Kerem Bakır, B Öztürk</p>	<p>IRG/WP 10-20448 Termite legislation in France: Termite control measures and prevention rules in building construction M Kutnik, M Jequel, I Paulmier, D Ansard</p> <p>IRG/WP 10-20451 Non-destructive evaluation of termite and decay damaged to timber-in- service C Adam, B M Ahmed Shiday, G Brodie</p> <p>IRG/WP 10-30546 Preventing decay in termite monitoring stations A M Taylor, Jae-Woo Kim, S Duarte, L Nunes, J D Lloyd</p>

THURSDAY 13 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
<p>08.30-10.30</p>		
<p>WP 3.3 Performance – lab tests</p> <p>Chair: Dr Xiao Jiang</p>	<p>WP 4.6 Thermal wood modification</p> <p>Chair: Dr Christian Welzbacher</p>	<p>Special session: Wood protection in the Mediterranean countries</p> <p>Chair: Dr Teresa de Troya</p>
<p>IRG/WP 10-30522 Adsorption of ACQ components in wood Myung Jae Lee, P Cooper</p> <p>IRG/WP 10-30528 A comparison of the chemistry of alkaline copper and micronized copper treated wood Wei Xue, P Kennepohl, J N R Ruddick</p> <p>IRG/WP 10-30533 Degradation of Carbon-Based Preservatives by Black-stain Fungi R Stirling, P I Morris</p> <p>IRG/WP 10-30538 Comparison of Micronized Copper Particle Sizes C R McIntyre</p> <p>IRG/WP 10-30540 A Comparison of the Performance of Related Copper Based Preservatives against Soft Rot M Ray, D Dickinson, K Archer</p> <p>IRG/WP 10-30541 Copper preservative systems: A rapid investigation into effects of co-biocides and used treating solutions T F Shupe, K Ragon, Q Wu, M H Freeman, C R McIntyre</p>	<p>IRG/WP 10-40496 Development of markers to predict decay durability of heat treated wood Ž Šušteršič, A Mohareb, M Chaouch, M Pétrissans, M Petrič, P Gérardin</p> <p>IRG/WP 10-40503 TMT–Interlab–Test to establish suitable quality control techniques - Structure and first results C R Welzbacher</p> <p>IRG/WP 10-40494 Hydrothermal modification for upgrading the durability properties of soft deciduous wood B Andersons, I Andersone, V Biziks, I Irbe, J Chirkova, E Sansonetti, J Grinins, H Militz</p> <p>IRG/WP 10-40513 Quality assurance approach of the German TMT manufacturers W Scheiding, C R Welzbacher, A O Rapp</p> <p>IRG/WP 10-40509 An investigation on some physical properties of oil heat treated poplar wood B Bazyar, D Parsapajouh, H Khademiesalam</p>	<p>IRG/WP 10-40491 Status of Wood Protection in Slovenia M Humar</p> <p>IRG/WP 10-40501 Wood Protection in Croatia – Situation from the Acquisition of Independence till Today R Despot, M Hasan</p> <p>IRG/WP 10-40502 The situation of wood preservation in Italy E Conti, S Palanti</p> <p>Situation in France</p> <p>IRG/WP 10-40511 Situation of Wood Protection in Spain B J Duval, J M Solis, T de Troya, M J Prieto</p> <p>IRG/WP 10-40530 Building With Wood an strategic action in Spain M Conde García, J I Fernández-Golfín Seco, J Galván Rodríguez</p>

THURSDAY 13 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
<p>11.00-12.30</p>		
<p>WP 3.1 Diffusible wood preservatives</p> <p>Chair: Dr Mark Manning (acting)</p>	<p>WP 4.6 Thermal wood modification</p> <p>Chair: Dr Christian Welzbacher</p>	<p>WP 2.3 Chemical/physical analysis</p> <p>Chair: Dr Lehong Jin (acting)</p>
<p>IRG/WP 10-30526 Effects of polyvinyl alcohol on leachability and efficacy of boron wood preservatives against fungal decay and termites attack A Mohareb, M F Thévenon, E Wozniak, P Gérardin</p> <p>IRG/WP 10-30529 Assessment of Boracol 200RH (FrameSaver) as a remedial treatment to control decay in pre-decayed model timber frame units M Hedley, D Page, J van der Waals</p> <p>IRG/WP 10-30535 Treatment of Scots pine wood with oil in water and water in oil emulsion systems: Effects on boron leaching and water absorption E D Tomak, Ü C Yildiz, A Can</p> <p>IRG/WP 10-50268 Combined Effect of Boric Acid and Waste Oil Treatment on Boron Leaching Ü C Yildiz, E Dizman</p>	<p>IRG/WP 10-40508 Direct estimation of the durability of high-pressure steam modified wood by ESR-spectroscopy W Willems, A Tausch, H Militz</p> <p>IRG/WP 10-40484 The Effects of Natural Weathering on the Properties of Heat Treated Alder Wood S Yildiz, Ü C Yildiz, E D Tomak</p> <p>IRG/WP 10-40532 Bioresistance of Poplar Wood Compressed by Combined-Hydro-Thermo-Mechanical Wood Modification (CHTM) Process L Khademi-Bami, B Mohebbi</p>	<p>IRG/WP 10-40512 Kinetic Water Vapour Sorption of Sitka Spruce at Variable Temperature Using the Parallel Exponential Kinetics Model Yanjun Xie, C Hill</p> <p>IRG/WP 10-20456 The use of thermal desorption and pyrolysis combined with a semiconductor VOC detector for the on-site detection of preservative-treated wood I Svensson, A Gonzalez, L Irusta, M^a J Fernandez-Berridi, O Munné</p> <p>IRG/WP 10-20436 Determination of a fixation time of wood preservatives: A discussion paper E Raphalen, E Melcher</p> <p>IRG/WP 10-40518 Acquisition of sorption isotherms for modified woods by the use of dynamic vapour sorption instrumentation: Principles and Practice E T Engelund, M Klamer, T Mark Venås</p>

THURSDAY 13 MAY

Auditorium	Vague 1 and 2	Vague 4 and 5
13.30-15.00		
<p>WP 3.2 New wood protecting chemicals</p> <p>Chair: Prof Dr Holger Militz</p>	<p>WP 4.6 Thermal wood modification</p> <p>Chair: Dr Christian Welzbacher</p>	<p>WP 2.3 Chemical/physical analysis</p> <p>Chair: Dr Lehong Jin (acting)</p>
<p>IRG/WP 10-30520 Synthesis of novelty borate compounds for wood preservatives: Laboratory test of leachability and decay resistance Zhiqiang Li, Mingliang Jiang, Xingxia Ma</p> <p>IRG/WP 10-30545 Natural compounds: A review of their use for wood protection T Singh, A P Singh</p> <p>IRG/WP 10-30523 Biological performance of wood treated with tar-oil recovered during slow pyrolysis of macadamia nut shells S Nami Kartal, E Terzi, C Kose, J Hofmeyr, Y Imamura</p> <p>IRG/WP 10-30531 Antifungal Essential Oil Metabolites C A Clausen, B M Woodward, V W Yang</p> <p>IRG/WP 10-30532 Antifungal Effect of Bark and Wood Extracts of <i>Condalia hookerii</i> (Rhamnaceae), <i>Ebenopsis ebano</i> (Fabaceae) and <i>Helietta parvifolia</i> (Rutaceae) on <i>Trametes versicolor</i> A Carrillo, J G Marmolejo, F Garza, V Bustamante, M Garza</p>	<p>IRG/WP 10-40523 Testing of decay resistance of sapwood and heartwood of thermally modified Scots pine and Norway spruce H Viitanen, S Metsä-Kortelainen</p> <p>IRG/WP 10-40524 Wet and dry adhesion of coatings on modified and unmodified wood: comparison of the pull-off test and the cross-cut test L Podgorski, G Gröll, M Truskaller, J D Lanvin, V Georges, S Bollmus</p> <p>IRG/WP 10-40514 Durability of heat treated Malaysian bamboo <i>Gigantochloa scortechinii</i> strips N Kamarudin, K Sugiyanto</p>	<p>IRG/WP 10-20436 Determination of a fixation time of wood preservatives: A discussion paper E Raphalen, E Melcher</p> <p>IRG/WP 10-40518 Acquisition of sorption isotherms for modified woods by the use of dynamic vapour sorption instrumentation: Principles and Practice E T Engelund, M Klamer, T Mark Venås</p> <p>IRG/WP 10-30547 Copper nanoparticles in southern pine wood treated with a micronised preservative: Can nanoparticles penetrate the cell walls of tracheids and ray parenchyma? H Matsunaga, Y Kataoka, M Kiguchi, P D Evans</p> <p>IRG/WP 10-20442 Trace chemicals used for studying fluid permeability of wood K Zimmer, E Larnøy, O Høibø</p>

THURSDAY 13 MAY

Auditorium

15.30 -16.30

Scientific Plenary Session

**Chairman: Mr Jack Norton Co-chairs: Dr Laurie Cookson, Dr Michael Kennedy, Dr Radu Craciun, Prof Dr Andreas O Rapp
Dr Niels Morsing (acting)**

- Reporting back from Sections
- Debate on the topic “The role of wood protection in green building and sustainability strategies”
- Announcements

16.30-17.15

Plenary session, cont'd from Monday 10 May

President: Dr Gérard Deroubaix

Vice-President: Mr Jack Norton

8. Approval of membership fees for 2011
9. Approval of the budgets for 2010 (forecast May 2010) and 2011 (IRG/WP 10-60288 and IRG/WP 10-60289)
10. Election of new officers
 - Vice President
 - Executive Council
 - Scientific Programme Committee

 - Information on EC appointments
11. Appointment of auditors
12. Future venues
 - IRG 42: 8-12 May 2011 in Queenstown, New Zealand
 - IRG 43: 6-10 May 2012 in Kuala Lumpur, Malaysia
13. Any other business
 - notification of future international meetings
14. Closure of the meeting

Tabled papers

Section 1 Biology

IRG/WP 10-10712

The invasion channels of damage fungi in bamboo lumber

Xingxia Ma, Mingliang Jiang, Daochun Qin

IRG/WP 10-10717

A review of Sitka spruce (*Picea sitchensis* (Bong.) Carr.) as its Importance and Breeding

I Usta, R Despot

IRG/WP 10-10736

The brown rot of oak wood submerged for 6 months in the Baltic sea

A Fojutowski, A Kropacz, I Pomian

IRG/WP 10-10740

Decay Resistance of Maple (*Acer Insigne*) Wood against White Rot

V Tazakor Rezaei

Section 2 Test methodology and assessment

IRG/WP 10-20444

A Review on Conditions for Decay Initiation and Progression

Jieying Wang, P I Morris

IRG/WP 10-20447

Adsorption of ionic liquids by Scots pine wood (*Pinus sylvestris* L.) and beech (*Fagus sylvatica* L.): equilibrium and kinetic modeling

J Zabielska-Matejuk, A Stangierska, M Kot

IRG/WP 10-20449

Stress wave and visual analysis of treated and non treated fence posts after 15 years in field test

A Florian da Costa, R Faustino Teles, J Costa Gonçalves

Section 3 Wood protecting chemicals

IRG/WP 10-30527

Effects of *Cunninghamia Lanceolata* Heartwood Extracts on the Growth of Wood Decay Fungi

Shujun Li, Jing Wang, Jian Li

IRG/WP 10-30543

Laboratory evaluation of borate amine: Copper derivatives in wood for fungal decay

G Chen

Section 4 Processes and properties

IRG/WP 10-40483

Effect of 4 Preservatives on Physical, Mechanical and Mold-Resistant Properties of Bamboo Oriented Strand Boards

Juwan Jin, Daochun Qin, Wanshu Wei, Kuan Fan

IRG/WP 10-40489

Study on the thickness swelling of mould-resistant chemical treated bamboo strand woven outdoor flooring

Fangli Sun, Binfu Bao, Shenyuan Fu, Anliang Chen

IRG/WP 10-40516

Non Toxic Remedial Treatment of Bamboo Structures/Furniture

S Kumar

IRG/WP 10-40525

Effect of borax-boric acid Treatment of simul (*Bombax ceiba*) Veneers on Glue-Bond Quality of Plywood

K Akhter, Md Abul Hashem, S Akhter

IRG/WP 10-40528

Preservative Treatment of simul (*Bombax ceiba*) Veneers with Hot and Cold Water Solution of borax-boric acid by Soaking Process

K Akhter, Md Abul Hashem, S Akhter

IRG/WP 10-40531

Silicon compounds as additives improving alkyd-based wood coatings performance

B Mazela, I Ratajczak, K Wichłacz-Szentner, P Hochmańska

Section 5 Sustainability and environment

IRG/WP 10-50269

Wood protection and climate change - Case in Japan

K Yamamoto, H Kato