

IRG Documents 2006

List of technical and other main documents received in 2006.

Section 1 Biology

IRG/WP 06-10569

The effect of mortality diseases on wood quality of sissoo (*Dalbergia sissoo* Roxb)

M M Islam, M O Hannan, G N M Ilias

IRG/WP 06-10570

Comparative study on physical properties of four fast growing timber species of Bangladesh

M M Islam, B K Dey, M O Hannan, G N M Ilias

IRG/WP 06-10571

On the changes of natural durability of wood sterilized by gamma radiation

R Despot, M Hasan, M Glavaš, G Rep

IRG/WP 06-10572

In vitro antifungal activity of chilli against wood degrading fungi

T Singh, C Chittenden, D Vesentini

IRG/WP 06-10573

Biological variability in the oxalate/oxalate decarboxylase system among five isolates of the wood-degrading fungus *Meruliporia incrassata*

C Howell, J Jellison

IRG/WP 06-10574

Fun with Soil Block Jars: Teaching fungal wood decay in the classroom

C Howell, L Gott, B Meehan

IRG/WP 06-10575

Micromorphological Characteristics of Degradation in Bamboo Attacked by White Rot Fungus *Lentinus edodes*

Chang Hyun Cho, Kwang Ho Lee, Yoon Soo Kim

IRG/WP 06-10576

Micromorphology of Bamboo Fibers Degraded by Brown-Rot Fungus *Gloeophyllum trabeum*

Kwang Ho Lee, Chang Hyun Cho, Yoon Soo Kim

IRG/WP 06-10577

Bamboo: A Material Rediscovered

S Kumar

IRG/WP 06-10578

Common Decay Micromorphology "Anomalies" Challenge Current Decay Classification

R Wakeling

IRG/WP 06-10579

New Observations and Interpretation for Tunnelling Bacteria Decay

R Wakeling

IRG/WP 06-10580

Correlation between modulus of elasticity, mass losses and FTIR spectra of copper treated decayed wood

M Humar, B Bučar, F Pohleven

IRG/WP 06-10581

Distribution and genetic variation of *Reticulitermes* (Isoptera: Rhinotermitidae) in Portugal

T Nobre, L Nunes, P Eggleton, D E Bignell

IRG/WP 06-10582

Laboratory Evaluation of Soft Rot Resistance of Non-Durable Lesser-Known Malaysian Hardwoods

A H H Wong

IRG/WP 06-10583

The "wire-loop slicing technique" for the rapid field collection of large numbers of *Coptotermes acinaciformis* termites from above-ground mound colonies.

B M Ahmed, J R J French

IRG/WP 06-10584

The role of oxalic acid in tolerance to N'-N-naphthaloylhydroxylamine in *Tyromyces palustris*

R A Arango, C A Clausen, F Green III

IRG/WP 06-10585

The bacterial transformation of organic biocides; a common mechanism?

D F Wallace, D J Dickinson

IRG/WP 06-10586

Future termite control requires partnership between industry, government and people.

J R J French, B M Ahmed

IRG/WP 06-10587

Evidence for Basidiomycete Tunnelling in *Pinus radiata* and *Fagus sylvatica*

R Wakeling

IRG/WP 06-10588

Isolation and characterization of hydroxyl-radical-producing glycopeptide genes from the white-rot basidiomycete *Phanerochaete chrysosporium*

H Tanaka, G Yoshida, Y Baba, K Matsumura, S Itakura, A Enoki

IRG/WP 06-10589

Blue Staining of Coated Modified and Unmodified Wood

M Petrič, M Pavlič, M Humar, M Tomažič

IRG/WP 06-10590

The effect of chitosan on the growth and physiology of two wood-inhabiting fungi

D Vesentini, T Singh

IRG/WP 06-10591

Quantification of methylene bis thiocyanate in wood and its effect on a sapstain fungus *Ophiostoma floccosum*

T Singh

IRG/WP 06-10592

Comparative studies of natural durability of Japanese cedar (*Cryptomeria japonica* D. Don) among the geographic cultivates

I Usta, K Takata, S Doi

IRG/WP 06-10593

Molecular characterization of M'jej, decaying agent of cedar forests in Morocco

A Zaremski, S Bakkali-Yakhlef, C Chaintreuil, Y Abbas, Y Prin, M Abourouh, M Ducousso

IRG/WP 06-10594

Natural durability of Norwegian wood species for above ground applications – Project presentation and preliminary results

P O Flæte, G Alfredsen, Fred G Evans

IRG/WP 06-10595

Direct analysis from wood of the blue stain fungi *Aureobasidium pullulans* and *Hormonema dematioides* by denaturing gradient gel electrophoresis

M J Ray, D J Dickinson

IRG/WP 06-10596

Decay resistance of coconut and rubber woods. Alternative wood species from Ghana

S Amartei, M Humar, B Donkor, F Pohleven

IRG/WP 06-10597

Resistance of pine and spruce heartwood against decay - The effect of wood chemical composition and coating with water-borne wood oil product
H Viitanen, S Metsä-Kortelainen, T Laakso

IRG/WP 06-10598

The natural durability of wood in different use classes. Part II
A O Rapp, U Augusta, K Brandt

IRG/WP 06-10599

Comparing microbial colonisation and decay rates of wood from sound and aphid-killed Kenyan-grown Mexican cypress (*Cupressus lusitanica*)
R Venkatasamy

IRG/WP 06-10600

Study of new wood preservatives from biological origin and low toxicity against wood decay organisms (fungi and termites)
M T Troya, M J Prieto, F Rubio, D Lorenzo, J J Teixidó

IRG/WP 06-10601

Effects of two insect growth regulators (IRGs) on *Microtermes diversus* (Silvestri) (Isoptera: Termitidae) in Southwest Iran
B Habibpour, M S Mossadegh, G Henderson, S Moharrampour

Section 2 Test methodology and assessment

IRG/WP 06-20321

Determination of corrosive effect of liquid wood preservatives to metals – First experiences with a National Standard which is in revision
E Melcher

IRG/WP 06-20322

Manual for inspection of waterborne preservative treated timber products
A K Lahiry

IRG/WP 06-20323

The potential for accelerated ageing to determine the persistence of active ingredients in timber
L D A Saunders, M R Powell

IRG/WP 06-20324

Borate Protection and Termites: Variation in Protection Thresholds Explained
B C Peters, C J Fitzgerald

IRG/WP 06-20325

Termite response to oil-heat-treated Norway spruce, Scots pine and Eucalyptus wood
L Nunes, T Nobre, C Welzbacher, A O Rapp

IRG/WP 06-20326

Identification of fungi colonising coated and modified wood exposed outdoors using sequencing and T-RFLP profiling
U Råberg, J Bijelovic, C J Land, S Bardage, N Terziev

IRG/WP 06-20327

Is Field Test Data from 20 x 20 mm Stakes Reliable? Effects of Decay Hazard, Decay Type and Preservative Depletion Hazard
R Wakeling

IRG/WP 06-20328

Time-of-Flight Secondary Ion Mass Spectrometry Analysis of Polyethylene Glycol Penetration into Wood Cell Walls
D Jeremic, P Cooper, P Brodersen

IRG/WP 06-20329

Efficacies of an insecticide and a fungicide for preventing blue-stain of Japanese red pine logs
H Taniuchi, T Koiwa, H Masuya, S Doi

IRG/WP 06-20330

Predicting the decay resistance of timber above-ground: 1. Climate effects

L P Francis, J Norton

IRG/WP 06-20331

EN 152: Is this Standard Relevant for today's Wood Preservatives? A Critical Review

B Jensen, F Imsgard, J Larsen

IRG/WP 06-20332

Effects of chlorothalonil (CTN) and butylated hydroxytoluene (BHT) on microbial communities involved in the deterioration of wood using T-RFLP I: Accelerated laboratory decay study

G T Kirker, M L Prewitt, S V Diehl

IRG/WP 06-20333

Moisture correction for ultrasonic MOE measurements above fibre saturation point in Scots pine sapwood

E Larnøy, G Alfredsen, H Militz

IRG/WP 06-20334

Effect of wood decay on the proportional limit of thin wood samples stressed in the bending mode

Gan Li, D D Nicholas, T P Schultz

IRG/WP 06-20335

Re-sealing cut ends of envelope-treated softwood framing timber to protect against damage by the Australian subterranean termite *Coptotermes acinaciformis*: A revisit

B C Peters, M Lenz, J W Creffield

IRG/WP 06-20336

Investigation on a Wood Decay Biomarker

S Mounguengui, S Dumarçay, P Gérardin

IRG/WP 06-20337

Japanese Classification of Wooden Building Members for ISO Use Classes according to the Building Code in Japan.

K Suzuki

IRG/WP 06-20338

The use of modulus of elasticity and modulus of rupture to assess wood decay in laboratory soil bed test

A Temiz, Ü C Yildiz

IRG/WP 06-20339

High-energy multiple impact (HEMI)-test – Part 2: A mechanical test for the detection of fungal decay

C R Welzbacher, C Brischke, A O Rapp

IRG/WP 06-20340

Laboratory methods for assessing the resistance of wood plastic composites to fungal attack

J J Morrell, A S Guzman

IRG/WP 02-20341

Testing durability of treated wood according to EN 252. Interpretation of data from Nordic test fields

M-L Edlund, F G Evans, K Henriksen, T Nilsson

IRG/WP 02-20342

L-joint based testing for service life prediction of exterior plywood in out of ground contact conditions

J De Smet, I De Windt, J Van Acker

IRG/WP 06-20343

Field Tests on Poles - A report from practice

A Peylo, C G Bechgaard

IRG/WP 06-20344

Measuring Soil Respiration as a New Approach to Describe the Interaction Between Wood (Treated and Untreated) and Microbiologically Active Soil

I Stephan, W Mierke

IRG/WP 06-20345

Overview of European discussions on Standardisation and list of proposed standards for WPC performance qualification

G Labat, M Vernois, T Gay

IRG/WP 06-20346

High-energy multiple impact (HEMI)-test – Part 1: A new tool for quality control of thermally modified timber

C Brischke, A O Rapp, C R Welzbacher

IRG/WP 06-20347

Testing biological durability of wood-plastic composites

J Van Acker

IRG/WP 06-20348

How to win friends and influence the market - Service Life Prediction and performance-based durability assessments of wood products in construction

F Englund

IRG/WP 06-20349

Qualitative and quantitative assessment of chemicals used for wood durability improvement by Near Infrared Spectroscopy

S Zahri, F Charrier, H Baillères, B Charrier

IRG/WP 06-20350

Standard Test Methods for Wood Preservatives by Laboratory Agar-Block Test

P K Sarker, M A Rahman, M R Bulbul, T Das, G N M Ilias

Section 3 Wood protecting chemicals

IRG/WP 06-30390

Performance of borate-treated lumber after 8 years in an above-ground termite field test in Hawaii

J K Grace, A Byrne, P I Morris, K Tsunoda

IRG/WP 06-30391

Water analysis in chemicals, wood or chemically treated wood using a new analytical method for selective water detection

R Craciun, D Taylor

IRG/WP 06-30392

The effect of woody and non woody plants extractives on microbial resistance of non-durable species

S M Kazemi, A Hosinzadeh, M B Rezaii

IRG/WP 06-30393

Biological resistance of didecyl dimethyl ammonium tetrafluoroborate (DBF)-treated wood in soil-bed and Basidiomycetes tests

S N Kartal, C Brischke, A O Rapp, Y Imamura

IRG/WP 06-30394

Protection of hard and softwood through Neem leaves extracts and oil - A direction towards development of eco-friendly wood preservatives

S Dhyani, S Tripathi

IRG/WP 06-30395

Performance of borate-treated lumber after 10 years in a protected, above-ground field test in Japan (Final report)

K Tsunoda, A Byrne, P I Morris, J K Grace

IRG/WP 06-30396

Preliminary screening of a boron based wood preservative for biological efficacy (fungicidal) in treated timber

S R Przewloka, J A Hann, P Vinden

IRG/WP 06-30397

The role of chromium in wood preservatives - The situation and new results concerning biological efficacy

P Jüngel, H Härtner, E Melcher

IRG/WP 06-30398

One year performance of graveyard stakes in the Northern Territory of Australia

B Ahmed, J Hann, S Przewloka, P Vinden, P Blackwell, P Plews

IRG/WP 06-30399

Enhancing the Performance of Transparent Coatings by UV Protective Pre-treatments

P I Morris, S McFarling

IRG/WP 06-30400

Exposure of CCA and ACZA treated parallel strand lumber to marine borer attack in Northeastern and Southeastern waters of the United States of America

B Goodell, P Merrick, J Jellison, Yuhui Qian

IRG/WP 06-30401

Investigation of new wood preservation formulations based on synergies between antioxidant, 2-HPNO and Propiconazole

B Bakhsous, S Dumarçay, E Gelhay, P Gérardin

IRG/WP 06-30402

Above and Below-Ground Depletion of Copper, Chromium and Arsenic from *Pinus radiata* and *Fagus sylvatica* at Thirteen Test Sites in New Zealand and Australia

R Wakeling

IRG/WP 06-30403

Efficacy of some fungicides against mold on freshly cut beech sawn wood

A Fojutowski, A Kropacz

IRG/WP 06-30404

Moldicidal properties of seven essential oils

V W Yang, C A Clausen

IRG/WP 06-30405

Laboratory and field evaluation of imidacloprid and cypermethrin as glue-line treatments for softwood plywood

J W Creffield, D K Scown

IRG/WP 06-30406

Performance of boron-treated radiata pine in above ground field tests in New Zealand

M Hedley, D Page

IRG/WP 06-30407

Performance of Preservative Treated Parallel Strand Lumber in Marine Exposures

J J Morrell, C S Love, P Merrick

IRG/WP 06-30408

Addition of boron compounds and octanoic acid for improvement of biocidal properties and copper fixation at copper-ethanolamine based wood preservatives

F Pohleven, M Humar

IRG/WP 06-30409

Long term marine performance of ACZA treated Hem fir in Krishnapatnam harbour, east coast of India

B Tarakanadha, K S Rao, J J Morrell

IRG/WP 06-30410

Effect of fumigation with sulfur dioxide on wood inhabiting fungi, a laboratory test

A Pfeffer, W Unger, G Fröba, G Binker

IRG/WP 06-30411

Ionic liquids with organic and inorganic anions as highly active wood preservatives

J Zabielska-Matejuk, A Skrzypczak

IRG/WP 06-30412

Surface and system treatments of wood for outdoor use

B Jacobsen, F G Evans

Section 4 Processes and properties

IRG/WP 06-40322

Non-pressure preservation technique of five less durable timber species – Kadam (*Anthocephalus cadamba*), Shimul (*Bombax ceiba*), Pithalu (*Trewia nudiflora*), Am (*Mangifera indica*) and Boroi (*Ziziphus jujube*) of Bangladesh

G N M Ilias, A H Kabir, F Begum, M F Alam

IRG/WP 06-40323

Biocide Treatments for Wood Composites—A Review

J W Kirkpatrick, H M Barnes

IRG/WP 06-40324

Comparative study between dipping and Boucherie method of bamboo preservation

A S M A Huda, S M Mithue, M N Islam, M O Hannan

IRG/WP 06-40325

Underwater shock treatment for improvement of penetration of wood

S Itoh, H Maehara, K Tanaka, T Echigo, K Morioka, E Shirai, K Nishimoto

IRG/WP 06-40326

Influence of Acetylation on Fire Resistance of Beech Plywood

B Mohebbi, A Talai, A Karimi, S Kazemi Najafi

IRG/WP 06-40327

Performance evaluation of Borax: Boric Acid treated Green bamboo through new VAC-FRI and conventional processes

S Tripathi, S N Nautiyal

IRG/WP 06-40328

The Effect of Wick Action upon Moisture Distribution in Ellagate Treated *Pinus radiata* Wood

S R Przewloka, B J Shearer, J A Hann

IRG/WP 06-40329

Corrosiveness of metal by copper-based preservatives

Ying Zhang, Mingliang Jiang

IRG/WP 06-40330

Assessment of the ease of preservative treatment in the less-valuable Nigerian-grown *Ceiba pentandra* wood

L Awoyemi, A J Pitman

IRG/WP 04-40331

The Influence of Extractives on Western Redcedar's Equilibrium Moisture Content

R Stirling, P I Morris

IRG/WP 06-40332

Heat treatment of less-valuable Nigerian-grown *Ceiba pentandra* wood for improved properties

L Awoyemi

IRG/WP 06-40333

Improvement of *Grevillea robusta* durability using heat treatment

F Mburu, S Dumarçay, F Huber, M Petrisans, P Gérardin

IRG/WP 06-40334

Copper Borate for the Protection of Engineered Wood Composites

R Smart, W Wall

IRG/WP 06-40335

The development of a novel method to preserve reeds using an environmentally friendly timber preservative and a unique engineering design

K Govender, K G Moodley

IRG/WP 06-40336

CCB Preservative treatment of split muli (*Melocanna baccifera*) bamboo by soaking process

K Akhter, M H Chowdhury

IRG/WP 06-40337

Study on Tanalith E treatability of rubberwood (*Hevea brasiliensis*) grown in Bangladesh
A K M Bosunia, M O Hannan, A A Mahfuz, M A Islam, M N Islam, K Mahmud, A K Lahiry

IRG/WP 06-40338

Wood plastic composites from modified wood. Part 1. Conceptual idea, mechanical and physical properties
P Larsson-Brelid, B K Segerholm, M Westin, M E P Wålinder

IRG/WP 06-40339

The commercialisation of ThermoWood® products
D Jones, E Suttie, J Ala-Viikari, N Bergstrom, D Mayes

IRG/WP 06-40340

Further discussion of biological durability assessments of acetylated wood from several European institutes
D Jones, W Homan, F Bongers

IRG/WP 06-40341

The Effect of Flavonoids on Colour and Spectral Changes of the Wood Surface Caused by Heat Treatment or Ultra-violet Irradiation
R Csonka-Rákosa, L Molnár-Hamvas, E Börcsök, J Molnár, K Németh

IRG/WP 06-40342

Paintability and gluability of wood treated with arsenic-free and chromium-free preservative treatments
L Podgorski, G Legrand

IRG/WP 06-40343

Characteristics of treated oriented strand lumber using recycle chips
T Shibusawa, A Miyatake, K Yamamoto, K Hashimoto, H Sonobe

IRG/WP 06-40344

Assessment of the Envelope Effect of Three Hot Oil Treatments: Resistance to Decay by *Coniophora puteana* and *Postia placenta*
M J Spear, C A S Hill, S F Curling, D Jones, M D Hale

IRG/WP 06-40345

Determination of physical properties of wood by Novel Guide
I Usta, M D Hale

IRG/WP 06-40346

A behaviour of CCA penetration of fir (*Abies bornmulleriana* Mattf.) at different ramp times and constant vacuum/pressure applications
I Usta, R Despot, M Hasan

IRG/WP 06-40347

Chemical reactions involved in furfurylation of solid wood - An investigation by ATR-IR spectroscopy
T Mark Venås, L Garbrecht Thygesen, S Barsberg

IRG/WP 06-40348

Protection of a low-density mangrove timber species gewa (*Excoecaria agallocha*) through preparation of particleboard – An Assessment
A A Mahfuz, M O Hannan, M A Islam, M N Islam, M M Islam, A K Lahiry

IRG/WP 06-40349

Furfurylated wood - An alternative to Preservative-treated wood
S Lande, M H Schneider, M Westin, J Phillips

IRG/WP 06-40350

Effect of fire retardants (monoammonium phosphate and diammonium phosphate, mixture of monoammonium phosphate and borax and ammonium sulphate) on beech wood with dipping and Lowry methods
M Akhtari, D Parsapajouh, M Arefkhani

IRG/WP 06-40351

Wood-Plastic Composites and the Durability Dilemma: Observations from the Field
M J Manning, F M Ascherl, M E Mankowski

IRG/WP 06-40352

Comparative studies on penetration and retention of CCA (C) and creosote in wood from aphid-killed and sound Kenyan-grown Mexican cypress (*Cupressus lusitanica*)
R Venkatasamy, F M Opar

IRG/WP 06-40353

Wood plastic composites from modified wood. Part 2. Durability in laboratory decay tests
M Westin, P Larsson-Brelid, M-L Edlund, G Alfredsen

IRG/WP 06-40354

Resistance of DMDHEU-treated pine wood against termite and fungi attack in field testing according to EN 252. Results after 30 months
S Schaffert, L Nunes, A Krause, H Militz

Section 5 Environmental aspects

IRG/WP 06-50237

Criteria for environmentally and socially sound and sustainable wood preservation industry
A K Lahiry, M R Hasan, M A J H Chowdhury

IRG/WP 06-50238

Thermal decomposition behavior of CCA-treated wood for safe disposal and the safe recovery of heavy metals through pyrolysis
Dong Won Son, Dong-heub Lee, Sun-hae Cheon, Myung Jae Lee

IRG/WP 06-50239

Arsenic removal by plant pumping mechanism from arsenic solution using activated aluminum oxide as adsorbent – a preliminary study
B Tarakanadha, H Koyanaka, T Hata, Y Imamura

IRG/WP 06-50240

Laboratory Leaching Tests to Study the Effects of Post-Treatment Storage Periods on CCA Leachability and Fixation in Treated Permeable and Refractory Malaysian Hardwoods
A H H Wong, H C Lai, N P T Lim

IRG/WP 06-50241

Leaching of CCA from *Paraserianthus falcataria* panels exposed to field conditions at Krishnapatnam harbour, Andhra Pradesh
B Tarakanadha, K S Rao

IRG/WP 06-50242

A Prediction of Arsenic Groundwater Concentrations Influenced by Construction and Demolition Debris Landfills in Florida Containing CCA-Treated Wood
J Jambeck, T Townsend, H Solo-Gabriele

Section 6 Other documents

IRG/WP 06-60214

Guidelines for Organizing an IRG Annual Meeting
IRG Secretariat

IRG/WP 06-60215

Annual report 2005
IRG Secretariat

IRG/WP 06-60216

International Directory of Members and Sponsors 2006
IRG Secretariat

IRG/WP 06-60217

Agenda 2006 Plenary meeting
IRG Secretariat

IRG/WP 06-60218
The 37th Annual Meeting of IRG. Scientific Programme and Abstracts
IRG Secretariat

IRG/WP 06-60219
Budget for 2006 (forecast June 2006)
IRG Secretariat

IRG/WP 06-60220
Budget for 2007
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IRG/WP 06-60221*
Agenda Finance Committee Meeting 2006
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IRG/WP 06-60222*
Agenda Scientific Programme Committee Meeting 2006
IRG Secretariat

IRG/WP 06-60223*
Agenda Executive Council Meeting 2006
IRG Secretariat

IRG/WP 06-60224*
Reporting minutes of the Finance Committee Meeting 2006
IRG Secretariat

IRG/WP 06-60225*
Reporting minutes of the Scientific Programme Committee Meeting 2006
IRG Secretariat

IRG/WP 06-60226*
Reporting minutes of the Executive Council Meeting 2006
IRG Secretariat

IRG/WP 06-60227
Requirements for hosting the Secretariat of IRG
IRG Secretariat

IRG/WP 06-60228
Reporting minutes of the Plenary Meeting 2006
IRG Secretariat

IRG/WP 06-60229
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