

IRG DOCUMENTS 1999

List of technical and other main documents issued in 1999

Section 1 Biology

IRG/WP 99-10298

rDNA-ITS sequence of *Serpula lacrymans* and other important indoor rot fungi and taxon-specific priming PCR for their detection

O Schmidt, U Moreth

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Cytochemical localization of hydrogen peroxide in brown rot fungus *Tyromyces palustris* by cerium chloride technique

Y S Kim, S G Wi

IRG/WP 99-10300

The dry rot fungus (*Serpula lacrymans*) in nature and its history of introduction into buildings

J Bech-Andersen, S A Elborne

IRG/WP 99-10301

Degradation of resin constituents in various wood species by the white-rot fungus *Bjerkandera* sp. strain BOS55

J Dorado, T A van Beek, F W Claassen, R Sierra-Alvarez

IRG/WP 99-10302

Assessment of the inhibition of wood decay fungi by volatile organic compounds identified from *Trichoderma* spp.

S N Humphris, R E Wheatley, A Bruce, C Payne

IRG/WP 99-10303

Variation in Canadian bluestain fungi: Tolerance to DDAC and DOT

J Dubois, A Byrne, J E Clark, A Uzunovic

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Dominant genera of fungi isolated from the surfaces of Sugi (*Cryptomeria japonica* D. Don) heartwood lumbers exposed at six test sites from northern to southern regions of Japanese islands

S Doi, M Mori, M Kiguchi, Y Imamura, M Hasegawa, S Morita, S Nakamura, Y Kadegaru

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Antifeedant activities of flavonoids and their related compounds against the subterranean termite, *Coptotermes formosanus* Shiraki

W Ohmura, S Doi, M Aoyama, S Ohara

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Examination of algal and wood extracts for the control of marine borers

D K Scown, L J Cookson, R de Nys

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Association of contents of nitrogen and sugars in rubberwood (*Hevea brasiliensis*) clones with susceptibility to sapstain by *Botryodiplodia theobromae*, *Aureobasidium pullulans* and *Aspergillus niger*

A J Ashari, J W Palfreyman, A H H Wong

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Behavioural and morphological adaptations to tidal inundation in the adult wood boring weevil *Pselactus spadix*

Herbst

P Oevering, A J Pitman

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Decay potential of various New Zealand *Phlebiopsis gigantea* strains using a soil block method

B Kreber, J van der Waals

IRG/WP 99-10310

Evaluation of New Zealand staining fungi for degradation of Radiata pine

A Schirp, R L Farrell, B Kreber

- IRG/WP 99-10311
Effect of wood moisture on ability of *Sphaeropsis sapinea* to colonise *Pinus radiata*
B Kreber, D Eden, R Wakeling, C Chittenden, J van der Waals, B Carpenter
- IRG/WP 99-10312
Preliminary indications of the natural durability of spruce bark board
P I Morris, J K Grace, G E Troughton
- IRG/WP 99-10313
Decrease in the mechanical resistance of blue stained and "orange stained" *Pinus radiata* wood
M C Rose, L Reyes, J Alvarez, A Andaur, C Beltrán, D Rivera
- IRG/WP 99-10314
A real scale evaluation method and results on termite resistance of housing wall systems and floor framings
K Suzuki, K Okada, K Hagio, Y Tanaka
- IRG/WP 99-10315
Enzymatic study of *Ceratocystis* sp., blue stain fungi on *Pinus nigra*
M T Troya, F Rubio, D Muñoz-Mingarro, F Llinares, C Rodriguez-Borrajo, M Yuste, M J Pozuelo, J I Fernandez-Golfín
- IRG/WP 99-10316
The effect of initial moisture content of wood decay at different levels of gaseous oxygen concentration
S M Kazemi, D J Dickinson, R J Murphy
- IRG/WP 99-10317
Inter-laboratory comparison of assessment methods for wood preservatives against subterranean termites: determination of protection threshold limits for CCA
J W Creffield, M Lenz
- IRG/WP 99-10318
Effect of some resin treatments on fungal degradation reactions
A-C Ritschkoff, M Rättö, A Nurmi, H Kokko, A Rapp, H Militz
- IRG/WP 99-10319
Gloeophyllum trabeum and *Gloeophyllum abietinum*, the most frequent brown rot fungi in fir wood joinery
R Despot, M Glavas
- IRG/WP 99-10320
Effect of substrate type and moisture requirements in relation to colony initiation in two carpenter ant species
M E Mankowski, J J Morrell
- IRG/WP 99-10321
Targeted inhibition of wood decay fungi: degradation of cotton cellulose
F Green III, T A Kuster
- IRG/WP 99-10322
Changed susceptibility of the chemically and thermally degraded spruce wood to its attack by the dry rot fungus *Serpula lacrymans*
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- IRG/WP 99-10323
Determination of absorption, accumulation and transport of copper in mycelium of some wood decay fungi
F Pohleven, S Breznikar, P Kalan, M Petric
- IRG/WP 99-10324
Biocontrol of *Reticulitermes santonensis* by entomopathogenic fungi
I Le Bayon, D Ansard, C Brunet, I Paulmier, A-M Pruvost
- IRG/WP 99-10325
Development of novel techniques for evaluating the feeding rate of *Limnoria lignorum* with specific reference to temperature influences
A Praël, S M Cragg, R A Eaton
- IRG/WP 99-10326
Characterisation of growth and stain of different sapstaining fungi on lodgepole pine
C Fleet, C Breuil, A Uzunovic, A Byrne

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FTIR characterization of copper ethanolamine -wood interaction
J Zhang, D P Kamdem

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Evaluation of wood treated with copper-based preservatives for Cu loss during exposure to heat and copper-tolerant *Bacillus licheniformis*
D M Crawford, C A Clausen

IRG/WP 99-20156
A review of the implementation of results-based standards for preservative treated timber
E D Suttie, A S Hughes, R J Orsler

IRG/WP 99-20157
International comparison of three field methods for assessing the in-ground termite resistance of materials - highlights after two years
M Lenz, J W Creffield, A F Preston, B M Kard, C Vongkaluang, Y Sornuwat

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Analysis of tebuconazole in wood treated with Tanalith™ E
D E Ferlazzo

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Screening of bacteria, yeasts and *Trichoderma* isolates for antagonism toward stain and mould fungi on agar media and wood
C Payne, A Bruce

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A spectroscopic investigation of copper ethylenediamine fixation in wood
X Jiang, J N R Ruddick

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A method to evaluate the effectiveness of bait application using a transferred nest of *Coptotermes formosanus* Shiraki (*Isoptera: Rhinotermitidae*)
K Tsunoda, T Yoshimura, H Matsuoka, Y Hikawa

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J A Snow, P Vinden, S M Read

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EELS (Electron Energy Loss Spectroscopy) -a technique for quantification of nitrogen and other light elements in the cell wall
A O Rapp, H Bestgen, W Adam, R D Peek

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Interim balance after 20 months of lap-joint exposure
M Sailer, A O Rapp, R D Peek, A Nurmi, E P J Beckers

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Detection of acoustic emission (AE) generated by termite attack in a wooden house
Y Fujii, Y Yanese, T Yoshimura, Y Imamura, S Okumura, M Kozaki

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Proposal for a simple methodology for the evaluation of the preventive effectiveness of protectors applied in superficial treatments against basidiomycetes fungi
M T Troya, A Navarrete, F Rubio, M Yuste, C Rodriguez-Borrajo, D Muñoz-Mingarro, F Llinares

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Chemical analysis of wood waste -The problem of sampling
A Peylo, R D Peek

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Preliminary PIXE micro-analysis of copper-chrome-arsenic preservative treated Malaysian hardwoods
A H H Wong, R B Pearce, G W Grime, F Watt

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Comparison of the FRIM and Forest Research laboratory methods for screening of anti-sapstain formulations
A H H Wong, D Eden, C Chittenden, M Hedley, R Wakeling

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UV-microspectrophotometry of lignin and accessory compounds in wood cell walls of conifers
G Kleist, G Koch, J Bauch

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The WOODCARE project: Development of detection methods for Death watch beetle larvae and fungal decay
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Chemical analysis of TnBTO in lap-joints
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The use of organic wood preservatives in ground contact and the suitability of laboratory test procedures to determine their efficacy
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Toxic values derived from EN 113 tests -are they determined by the virulence of a test fungus?
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Characterization and differentiation of wood rotting fungi by protein and enzyme patterns
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The treatment of Douglas fir fence posts: specification and compliance using new European standards
R J Orsler, H Derbyshire

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Determination of bis-(cyclohexyl-diazoniumdioxy)-copper in different matrices by photometer, thermal energy analyser and HPLC
J Wittenzellner, W Hettler, M Maier

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Section 3 Wood protecting chemicals

IRG/WP 99-30188
Sentry[®], a new antisapstain formulation for protecting logs and lumber. Part 1: advances in protection of New Zealand radiata pine logs
R Wakeling, D Eden, C Chittenden, J van der Waals, B Carpenter, I Dorset, R Kuluz, J Wakeman, T Price, B Nairn

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M K Yalinkilic, W Dwianto, Y Imamura, K Tsunoda, M Takahashi

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Effect of mobile fungicides on fungal pre-infection in radiata pine billets
D Eden, T Singh, B Kreber

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The biocidal efficacy of sulphates against basidiomycetes
H Leithoff, E Melcher

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Polymeric alkylphenol polysulfide -a new wood preservative compound
J Goswami, A Abramson, R Buff, D Nicholas

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In situ testing the influence of melamine resins on the enzymatic activity of basidiomycetes
D Lukowsky, F Büschelberger, O Schmidt

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Five years leaching of boron
A Peylo, H Willeitner

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The lasting dehydration of wood treated by bifluorides worked up in Diffusec noticed by a continual drying of the wood
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IRG/WP 99-30197
Diazenes and some organic complexes of boron as potential fungicides for preservation of wood
M Petric, B Paradiz, J Stern, F Pohleven, S Polanc, B Stefane, R Lenarsic

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Fungicidal activity of some new water borne copper octanoate based formulations
M Petric, M Pavlic, F Pohleven, P Segedin, B Kozlevcar, S Polanc, B Stefane, R Lenarsic

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Laboratory bioassay on the termiticidal efficacy of two ACQ formulations
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Interaction of copper-amine complexes with wood: influence of copper source, amine ligands and amine to copper molar ratio on copper retention and leaching
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Protection of southern pine using N, N-Naphthaloylhydroxylamine: field tests, soft-rot cellars and aquatic bioassay leach testing
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The potential of 2-deoxy-D-glucose as an active ingredient in wood preservation
O Frederiksen, A P Koch

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Decay resistance of resin treated wood
J Van Acker, A Nurmi, S Gray, H Militz, C Hill, H Kokko, A Rapp

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The leachability, biological resistance and mechanical properties of wood (*Pinus sylvestris* L.) treated with CCA and CCB preservatives
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5 years field test results for CCA and ACQ preservatives fixed in different climates
F G Evans

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The effect of ACC (Celcure) on durability of Blue beech
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IRG/WP 99-30212

Potentialities of protein borates as low-toxic, long-term wood preservatives. Preliminary trials.
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Section 4 Processes

IRG/WP 99-40129

Water-storage for improving the permeability of Sugi (*Cryptomeria japonica* D Don) wood
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Manual of a mini treating plant for waterborne preservative treatment of timber and bamboo
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Preservative treatment of Golpata (*Nypa fruticans*) using CCB (chromated copper boric acid)
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Biological and physical properties of phenolic-resin treated wood before and after natural weathering
S Yusuf, Y Sudiyani, H Kajita, Y Imamura, M Takahashi

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Application of radio frequency heating to accelerate fixation of CCA in treated round-wood
F Fang, J N R Ruddick

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Soil bed studies of the dimensional stability of composite products
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The effect of chemical treatment on the moisture distribution of *Pinus radiata* D. don subjected to wick action
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Multiple-Phase Pressure (MPP) process: One-stage CCA treatment and accelerated fixation process. Treatment of Sitka spruce and Scots pine
M Hedley, K Nasheri, G Durbin

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Effects of pre-harvest girdling on selected properties of red pine, red maple and eastern larch
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Mechanical resistance of *Pinus radiata* CCA treated and face jointed with PVA adhesive
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A study of poplar LVL durability improvement
B Charrier, V Bridaux, N Fauroux, F Charrier

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Section 5 Environmental aspects

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Statistically stable models for determination of PEC
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Optimum growth conditions for the metal-tolerant wood decay fungus, *Meruliporia incrassata* TFFH 294
V W Yang, B Illman

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Other documents

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Agenda Finance Committee Meeting 1999
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