

U.S.A. (continued)

Koppers Co Inc
Mooney Chemicals, Inc
The New Orleans Pest Control Association
Occidental Chemical Corporation
Osmose Wood Preserving Company of America Inc
Rohm and Haas Co
Troy Chemical Corporation Inc
University of Minnesota
Weyerhaeuser Co

Yugoslavia Belinka, Razvojno tehnološki sektor

Western Europe Western European Institute for Wood Preservation

APPENDIX

List of technical and other main documents issued by the IRG Secretariat since the last Annual Report

Working Group Ia

- Antagonistic effect of some mycorrhiza fungi
as biological control of blue-stain
by Riana Benko (87-02-11) Document No: IRG/WP/1314
- Effects of air-seasoning on fungal colonization
and wood strength of Douglas fir poles
by Jeffrey J Morrell et al (87-02-15) Document No: IRG/WP/1315
- Susceptibility of *Lentinus lepideus* (Fr. ex Fr.) Fr.
to volatiles produced by spp by Alan Bruce,
C Johnstone & J A P McVey (87-03-02) Document No: IRG/WP/1316
- Isolation and identification of bacteria from
CCA-treated eucalypt power transmission poles
by G A Willoughby, A C Hayward & Liam E Leightley
(87-03-02) Document No: IRG/WP/1317
- Physical properties of β -1,4-xylanase produced by
Postia (= *Poria*) *placenta*: implications for the
control of brown rot by Jessie A Micales, F Green,
C A Clausen & Terry L Highley (87-03-06) Document No: IRG/WP/1318
- Biochemical aspects of white-rot and brown-rot
decay by Terry L Highley (87-03-18) Document No: IRG/WP/1319
- Influence of variable lignin content on brown
rot decay of wood
by Thomas Nilsson & Geoffrey Daniel (87-03-25) Document No: IRG/WP/1320

- Comparative studies on the distribution of lignin and CCA elements in birch using electron microscopic X-ray microanalysis by Geoffrey Daniel & Thomas Nilsson (87-04-13) Document No: IRG/WP/1328
- Pretreatment decay in poles of *Pinus sylvestris* by Hans Lundström & Marie-Louise Edlund (87-03-05) Document No: IRG/WP/1329
- Production, function and neutralization of oxalic acid produced by the dry rot fungus and other rot fungi by J Bech-Andersen (87-04-27) Document No: IRG/WP/1330
- Minutes of the meetings of Working Group Ia 'Biological Problems (Flora)' held at Delawana Inn, Honey Harbour, Ontario, Canada during 18-22 May 1987 (87-07-30) Document No: IRG/WP/1335
- A bibliography of the dry rot fungus, *Serpula lacrymans* by Günther Seehann & Bryan M Hegarty (88-01-14) Document No: IRG/WP/1337
- Bacteria as possible organisms for biological control of blue stain by Riana Benko (88-01-31) Document No: IRG/WP/1339
- Basidiospore structure and germination of *Serpula lacrymans* and *Coniophora puteana* by Bryan Hegarty & Uwe Schmitt (88-02-08) Document No: IRG/WP/1340
- Some physical characteristics of a non-degradative strain of *Postia* (= *Poria*) *placenta* by Jessie A Micales & Terry L Highley (88-02-15) Document No: IRG/WP/1341
- The effect of tunicamycin on production and secretion of extracellular carbohydrate-degrading enzymes by *Postia placenta* by Jessie A Micales & Terry L Highley (88-02-15) Document No: IRG/WP/1342
- Spatial arrangement of lignin peroxidase in pine decayed by *Phanerochaete chrysosporium* & *Fomitopsis pinicola* by Ewald Srebotnik & Kurt Messner (88-02-15) Document No: IRG/WP/1343
- Feasibility of using biological control agents to arrest and prevent colonization of Douglas fir and southern pine by decay fungi by J J Morrell & C M Sexton (88-02-15) Document No: IRG/WP/1345
- The dry rot fungus *Serpula lacrymans*. Examples of attack and remedial treatment by G Buchwald, B Hegarty, W Metzner, R Pospischil, H Sigmund & P Grabow (88-02-19) Document No: IRG/WP/1347
- Fruitbody formation and basidiosporogenesis by the white rot fungus *Pycnoporus cinnabarinus* by Jonny Bjurman (88-02-08) Document No: IRG/WP/1348

- The importance of blue stain attack for the colonization by wood-rotting fungi of wood not in contact with the ground
by Jonny Bjurman (88-02-10) Document No: IRG/WP/1349
- Properties of cellulose degraded by the brown rot fungus, *Postia placenta* by Terry L Highley, Rebecca Ibach & T Kent Kirk (88-02-16) Document No: IRG/WP/1350
- Partial characterization of inhibitors extracted from Pine (*Pinus sylvestris*) sapwood active against germination of wood-rotting fungi
by Jonny Bjurman (88-02-24) Document No: IRG/WP/1351
- Detection of methanogenic bacteria in mining timber by Linda D Abraham, Kenneth Westlake, Roderick I Mackie, John F Putterill & Albin A W Baeker (88-02-24) Document No: IRG/WP/1352
- Defining fungal decay types - final proposal
by Thomas Nilsson (88-02-29) Document No: IRG/WP/1355
- The possible significance of the lignin content and lignin type on the performance of CCA-treated timber in ground contact by Thomas Nilsson, John R Obst & Geoffrey Daniel (88-03-03) Document No: IRG/WP/1357
- Micromorphology of the decay caused by *Chondrostereum purpureum* (Pers.:Fr.) Pouzar and *Flammulina velutipes* (Curt.:Fr.) Singer
by Thomas Nilsson & Geoffrey Daniel (88-03-04) Document No: IRG/WP/1358
- An electron spin resonance study of manganese changes in wood decayed by the brown rot fungus, *Postia placenta* by Barbara L Illman, D C Meinholtz & Terry L Highley (88-03-04) Document No: IRG/WP/1359
- Generation of hydroxyl radical by the brown-rot fungus, *Postia placenta* by Barbara L Illman, D C Meinholtz & Terry L Highley (88-03-04) Document No: IRG/WP/1360
- Immunolocalization of extracellular metabolites from *Poria placenta* by Barry Goodell, Geoffrey F Daniel, Jody Jellison & Thomas Nilsson (88-03-04) Document No: IRG/WP/1361
- Bacterial staining of samba (*Triplochiton scleroxylon*) by Kurt Hansen (88-03-07) Document No: IRG/WP/1362
- Immunolabelling studies on the detection of enzymes during the degradation of wood by *Phanerochaete chrysosporium* by Geoffrey F Daniel, Thomas Nilsson & B Pettersson (88-03-09) Document No: IRG/WP/1364
- Interactions between soft rot fungi and CCA preservatives in *Betula verrucosa* by Geoffrey F Daniel & Thomas Nilsson (88-03-14) Document No: IRG/WP/1367

The occurrence of soft rot in creosoted wooden poles by A Wylde & D J Dickinson (88-03-14) Document No: IRG/WP/1368

The critical moisture and temperature conditions for the growth of some mould fungi and the brown rot fungus *Coniophora puteana* by Hannua Viitanen & Leena Paajanen (88-03-24) Document No: IRG/WP/1369

Microbiological degradation of wooden piles in building foundations by Leena Paajanen & Hannu Viitanen (88-03-24) Document No: IRG/WP/1370

Working Group Ib

Review of the literature on Lyctidae (Coleoptera) by Erwin Graf (87-02-27) Document No: IRG/WP/1211

Efficacy of deltamethrin associated with TCMTB and MBT for the temporary protection of timbers immediately following their sawing, in tropical countries by Jean S Duguet & Vincent Dartigues (87-01-30) Document No: IRG/WP/1321

Effects of methoprene on *Coptotermes formosanus* (Isoptera: Rhinotermitidae) by Susan C Jones (87-03-06) Document No: IRG/WP/1322

Soil termiticides: A review of efficacy data from field tests by Joe K Mauldin, Susan C Jones & Raymond H Beal (87-03-31) Document No: IRG/WP/1323

Termite standards questionnaire survey by John R J French & Jeffery P La Fage (87-04-06) Document No: IRG/WP/1324

Variance in feeding on equivalent wood blocks by the Formosan subterranean termite (*Coptotermes formosanus* Shiraki) by Jeffery P La Fage & Keith S Delaplane (87-04-10) Document No: IRG/WP/1325

Poplar wood and its damages in Iran by Davoud Parsapajouh & Parviz Niloufari (88-04-30) Document No: IRG/WP/1332

Termites in Eastern Canada: A brief review and assessment by J Kenneth Grace (87-05-07) Document No: IRG/WP/1333

Data sheet on woodboring insects. *Ptilinus pectinicornis* (Linnaeus) by (the late) Siegfried Cymorek & Marie-Madeleine Serment (87-05-20) Document No: IRG/WP/1334

Minutes of the meetings of Working Group Ib 'Biological Problems (Fauna)' held at Delawana Inn, Honey Harbour, Ontario, Canada during 18-22 May 1987 (87-08-05) Document No: IRG/WP/1336

- Preference of the Formosan subterranean termite for wood previously damaged by conspecifics
by J P La Fage & K S Delaplane (88-01-18) Document No: IRG/WP/1338
- Suppression of termite feeding by Sudan Red 7B
by K S Delaplane, L A Bourg & J P La Fage (88-02-15) Document No: IRG/WP/1344
- Justification for use of mirex in termite control
by J R J French (88-02-19) Document No: IRG/WP/1346
- Evaluation of the population of a mound colony of *Coptotermes lacteus* (Froggatt)
by D M Ewart & J R J French (88-02-24) Document No: IRG/WP/1353
- Termites standards questionnaire survey - First Report
by J R J French & J P La Fage (88-02-24) Document No: IRG/WP/1354
- Effects of chemicals used for groundline protection of hardwood poles on termite attack
by R S Johnstone & R W Eldridge (88-03-02) Document No: IRG/WP/1356
- Screening potential termiticides: some thoughts and suggestions on methodology
by J R J French (88-03-07) Document No: IRG/WP/1363
- Peniochra fasciata* (Stephens) (Col. Cerambycidae) a pest in wood materials
by Anna Gambetta & Elisabetta Orlandi (88-03-09) Document No: IRG/WP/1365
- A behavioural assay for measuring feeding deterrence of a slow-acting biocide, A-9248, against the Formosan subterranean termite (Isoptera: Rhinotermitidae)
by Nan-Yao Su & Rudolph H Scheffrahn (88-03-14) Document No: IRG/WP/1366

Working Group II

- Co-operative research project on L-joint testing. Sampling after 4 years exposure
by Janice K Carey & A F Bravery (88-02-03) Document No: IRG/WP/2274
(issued only to Sub-group 2 participants)
- Detection of incipient brown rot decay in wood by Fourier transform infrared spectrometry
by Darrel D Nicholas & T P Schultz (86-12-11) Document No: IRG/WP/2275
- Basidiospore production by *Lentinus lepideus* in vitro
by Jonny Bjurman (87-02-26) Document No: IRG/WP/2276
- Sampling rates and the probability of detecting defective treatment in the sampling of preservative treated timber
by M J Kennedy & Liam E Leightley (87-03-02) Document No: IRG/WP/2277

- The use of low cost X-ray fluorescence instruments in the determination of copper, chromium and arsenic in preservative treated wood
by Jack Norton & Liam E Leightley (87-03-02) Document No: IRG/WP/2278
- A novel method for evaluating the performance of water repellents by Alan R Moffat (87-03-02) Document No: IRG/WP/2279
- Ultra-structural observations on the degradation of wood surfaces during weathering
by Philip D Evans & S Thein (87-03-04) Document No: IRG/WP/2280
- A technique for the rapid assessment of wood surface degradation during weathering
by P D Evans, D Abbott & S Thein (87-03-04) Document No: IRG/WP/2281
- The mathematical study of test plot data
by Winslow H Hartford (87-03-04) Document No: IRG/WP/2282
- The effect of aqueous leaching on moisture uptake by CCA-treated blocks during soil burial by Carol A Green, George M Smith & Bernard King (87-03-04) Document No: IRG/WP/2283
- The movement of iron into field test stakes
by John N R Ruddick & Paul I Morris (87-03-25) Document No: IRG/WP/2284
- Computerized axial tomography - a non-destructive method for three-dimensional wood density/moisture content measurements by Owe Lindgren (87-04-01) Document No: IRG/WP/2285
- Copper based water-borne preservatives: The use of a thin section technique to compare the protection of wood by copper based preservatives against soft-rot and bacterial decay
by A M Wayles & David J Dickinson (87-04-06) Document No: IRG/WP/2286
- Report of activity of CEN/TC 38 Test Methods for Wood Preservatives by Gérard Castan (87-04-16) Document No: IRG/WP/2287
- Evaluation of the decay caused by *Chaetomium globosum* Kunze, in the course of time
by M T de Troya & Angeles Navarrete (87-04-22) Document No: IRG/WP/2288
- Comparison between two laboratory test methods for determining the effectiveness on wood preservatives against blue stain in fresh wood
by Angeles Navarrete & M T de Troya (87-04-22) Document No: IRG/WP/2289
- A technique for determining the efficacy of water diffusible preservative plugs for implanting in joinery in service by Janice K Carey & Anthony F Bravery (87-05-05) Document No: IRG/WP/2291
- Final proposals for collaborative work on laboratory soft rot testing by David J Dickinson & Scarlett M Gray (87-05-11) Document No: IRG/WP/2292

- A non-destructive testing technique for wood poles
by M W Murphy, D E Franklin & R A Palylyk
(87-05-15) Document No: IRG/WP/2293
- Inspection of tropical hardwood window frames in
Nigeria for decay presence by Michael A Odeyinde,
M A Amakiri, E B Lucas, J O Eyenike & S Akanni
(87-04-29) Document No: IRG/WP/2294
- Studies on the permeability of Norway spruce
(*Picea abies*) by Ingvar Johansson & Katarina
Nordman-Edberg (87-05-11) Document No: IRG/WP/2295
- Minutes of the meetings of Working Group II
'Fundamentals of Testing' held at Delawana Inn,
Honey Harbour, Ontario, Canada during 18-22 May
1987 (87-08-21) Document No: IRG/WP/2296
- Determination of toxicity data for preservatives
against Basidiomycetes by measuring the reduction
in compression strength of wood
by Jerzy Ważny & John D Thornton (87-12-03) Document No: IRG/WP/2297
- Permeability measurements on surface layers for
detecting wood with abnormally high permeability
by J B Boutelje & G Hägglund (88-01-27) Document No: IRG/WP/2298
- Japanese standardized method for evaluating
effectiveness of anti-sapstain and anti-mold
chemicals by Kunio Tsunoda & Koichi Nishimoto
(88-01-29) Document No: IRG/WP/2299
- The influence of timber species and preservative
treatment on spore germination of some
wood-destroying basidiomycetes by Bryan Hegarty &
Gustav Buchwald (88-02-08) Document No: IRG/WP/2300
- Effect of angle of exposure on degradation of
Radiata pine during weathering trials
by P D Evans (88-02-09) Document No: IRG/WP/2301
- Non-destructive detection of the presence and
behaviour patterns of wood-destroying insects
by Michael Pallaske (88-02-15) Document No: IRG/WP/2302
- Evaluation and approval of wood preservatives in
Japan by Kunio Tsunoda (88-02-15) Document No: IRG/WP/2303
- New technique to analyse impregnation processes
by J P Hösli (88-02-15) Document No: IRG/WP/2304
- Performance of water-borne pressure treated fence
posts - A practical application of the new
Canadian field test data base
by E E Doyle, R Dubois & J P Hösli (88-02-15) Document No: IRG/WP/2305

A direct basidiomycete test methodology. Report on an EWPM ring test by Bjørn Jensen (88-02-16) Document No: IRG/WP/2306

Use of immunoblotting for the analysis of wood decay Basidiomycetes by J W Palfreyman, H Glancy, D Button, A Vigrow, A Score & B King (88-02-26) Document No: IRG/WP/2307

An attempt to evaluate wood resistance against fungal decay in non-sterile conditions by measuring the variation of resistance to bending test by Lucien N Trong (88-02-29) Document No: IRG/WP/2308

A technique for assessing the preventive efficacy against decay fungi of preservative treatments applied to wood by Janice K Carey & A F Bravery (88-03-04) Document No: IRG/WP/2309

Evaluation and approval of wood preservatives - unification of wood preservatives by Jöran Jermer (88-03-15) Document No: IRG/WP/2310

Evaluation and approval of wood preservatives in the Nordic countries by Björn Henningsson & Jöran Jermer (88-03-17) Document No: IRG/WP/2311

Design of a laboratory method for evaluating the effectiveness of soft rot preservatives by M Teresa Troya & Angeles Navarette (88-03-16) Document No: IRG/WP/2312

Working Group III

Some tests on ES - AS 11, a novel anti-sapstain formulation, and its properties by Udo Straetmans (86-12-11) Document No: IRG/WP/3399

The efficacy of boron preparations by Mr J T de Jonge (86-12-30) Document No: IRG/WP/3400

Risk of pulmonary damage as a result of an evaporation of ca. 50 ppb = 42 ug HF, evaporated from wood treated by difluoride by H F M Nijman (87-01-07) Document No: IRG/WP/3401

Field evaluation of antisapstain products by Maria Cristina Rose & Augusto Bedoya (87-01-20) Document No: IRG/WP/3402

Some characteristics of *Pinus radiata* wood from trees subjected to resin extraction by Maria Cristina Rose, José Navarrete, Gonzalo Sandoval, Augusto Bedoya & Roberto Zurita (87-01-20) Document No: IRG/WP/3403

Wood preservation in Uruguay by Gustavo Baillod (87-02-09) Document No: IRG/WP/3404

Notes on a wood preservation industry in Medan
North Sumatera, Indonesia
by Nana Supriana & Abdul Murad (87-02-10) Document No: IRG/WP/3405

Environmental aspects of wood preservation
by Harry Greaves (87-02-11) Document No: IRG/WP/3406

Waterborne DNBP wood preservatives - Preparation
and performance
by W E Conradie & A Pizzi (87-02-17) Document No: IRG/WP/3407

Low-toxicity DNBP wood preservatives by A Pizzi,
W E Conradie, A Jansen & R Vosloo (87-02-17) Document No: IRG/WP/3408

Effectiveness of Busan 30 in a soil medium
by H C Konabe (87-02-18) Document No: IRG/WP/3409

Effectiveness of Busan 30 treated birch blocks
in a soil medium by H C Konabe (87-05-18) Document No: IRG/WP/3409
(revised)

Movement of chloropicrin, Vapam, and
methylisothiocyanate in southern pine and Douglas
fir timbers by Terry L Highley (87-02-19) Document No: IRG/WP/3410

Effect of wrapping on movement of chloropicrin,
Vapam, and Vanicide TH in southern pine timbers
by Terry L Highley (87-02-19) Document No: IRG/WP/3411

Dimensional stability of wood with dimethylol
compounds by D D Nicholas & A D Williams
(87-02-23) Document No: IRG/WP/3412

Effect of post-treatment drying schedule on the
modulus of elasticity of CCA-treated southern
pine dimension stock using non-destructive methods
by H M Barnes & Scott Moore (87-02-23) Document No: IRG/WP/3413

The compatibility of tributyltin fungicides and
synthetic pyrethroid insecticides as wood
preservatives by S J Blunden & R Hill (87-02-24) Document No: IRG/WP/3414

Effects of the sulfuric acid modification of
CCA treating solution by Roger F Fox, Harry J Fry,
Eugene A Pasek & Alan S Ross (87-02-18) Document No: IRG/WP/3415

Commercially available anti-sapstain chemicals in
New Zealand - un update by Jeanette A Drysdale
(87-02-26) Document No: IRG/WP/3416

A field trial of water repellents as anti-sapstain
treatment additives by Jeanette A Drysdale &
David V Plackett (87-02-26) Document No: IRG/WP/3417

A case study on quality control on telephone poles
as a cost saving tool in Tanzania
by K K Murira (87-03-02) Document No: IRG/WP/3418

- Chemical and biological studies of organotin treated and painted wood stakes after outdoor exposure by Marie-Louise Edlund & Björn Henningsson (87-03-02) Document No: IRG/WP/3419
- Fungicidal effectiveness of amended alkylammonium compounds by Kunio Tsunoda & Koichi Nishimoto (87-02-26) Document No: IRG/WP/3421
- The interaction of polyflavonoid tannins with CCA in *Pinus radiata* by K G Ryan & D V Plackett (87-03-02) Document No: IRG/WP/3422
- The examination of preservative-treated radiata pine using electron spin resonance spectroscopy by D V Plackett, E W Ainscough & A M Brodie (87-03-02) Document No: IRG/WP/3423
- Supply of wooden transmission and telephone poles in Tanzania: Problems and possible solutions by K K Murira & S A Diwani (87-03-04) Document No: IRG/WP/3424
- Discussion of diiodomethyl p-tolyl sulfone (Amical® 48) as a fungicide for wood preservation by J M Stamm, K J Littel, F M H Casati & M B Friedman (87-03-04) Document No: IRG/WP/3425
- Fungicidal combination products by Horst A B Landsiedel (87-03-06) Document No: IRG/WP/3426
- Preservation of coppice wood for the fabrication of glued beams or panels by Gérard R Y Déon & R Schwartz (87-03-06) Document No: IRG/WP/3427
- The treatability of five Indonesian wood species with BFCA preservatives by Nana Supriana & Totok Kartono Waluyo (87-03-06) Document No: IRG/WP/3428
- The antifungal efficacy of guayule resin by J D Bultman, R L Gilbertson, T L Amburgey, J E Adaskaveg, S V Parikh & C A Bailey (87-03-09) Document No: IRG/WP/3429
- The influence of wood moisture content on the fungitoxicity of methylisothiocyanate in Douglas fir heartwood by A R Zahora & J J Morrel (87-03-10) Document No: IRG/WP/3430
- Fluoride woodpill by Jan W P T van der Drift & Karel J M Bonsen (87-02-01) Document No: IRG/WP/3431
- The efficacy of remedial treatments for controlling fungal decay in window millwork used in the United States by Mark G Dietz & Elmer L Schmidt (87-03-04) Document No: IRG/WP/3432

- Leaching from CCA-impregnated wood to food,
drinking-water and silage
by Fred G Evans (87-03-12) Document No: IRG/WP/3433
- Some relationship between physical characteristics
and treatability of Bolivian woods
by Silverio Viscarra A (87-03-13) Document No: IRG/WP/3434
- Preservative treatment of *Pinus elliottii*
by P Vinden & L Carter (87-03-16) Document No: IRG/WP/3435
- A field evaluation of modified and unmodified
alkylammonium compounds
by J N R Ruddick (87-03-16) Document No: IRG/WP/3436
- Diffusion treatment of gauged radiata pine timber
using "Boracol 20" by David Page, Peter Vinden &
Steve Retter (87-03-16) Document No: IRG/WP/3437
- Strength losses associated with steam conditioning
and boron treatment of radiata pine framing
by M J Collins & Peter Vinden (87-03-16) Document No: IRG/WP/3438
- Steam/hold/APM boron treatment - treatability
trials with green gauged radiata pine
by Peter Vinden (87-03-19) Document No: IRG/WP/3439
- Movement of water through quaternary ammonium
treated wood
by Peter Hayward & Jean Duff (87-03-09) Document No: IRG/WP/3440
- Accelerated decay tests on DNBP-treated *Pinus*
patula and *Eucalyptus grandis* by L D Abraham &
Albin A W Baecker (87-03--24) Document No: IRG/WP/3441
- Fungus cellar and stake tests with tall oil
derivatives. Progress Report after 5 years'
testing by Jöran Jermer, Östen Bergman & Thomas
Nilsson (87-03-26) Document No: IRG/WP/3442
- Kiln drying of CCA-treated wood - Some safety
and environmental considerations
by Jöran Jermer & Björn Lundberg (87-03-26) Document No: IRG/WP/3443
- Glulamined poles - Progress report after 7
years' testing
by Jöran Jermer & Östen Bergman (87-03-26) Document No: IRG/WP/3444
- A suggestion for the improvement of the chemical
protection of wooden poles
by Henning Friis-Hansen (87-03-30) Document No: IRG/WP/3445
- Water-based water repellents for treatment of wood
by I Gunilla Svensson, Göran Hägglund, Ingvar
Johansson (Sweden) & W Bart Banks (87-03-30) Document No: IRG/WP/3446

- A report on the development of "Technical Recommendations Document for the Canadian Wood Preservation and Protection Facilities" by Gautam Das & Vishwa N P Mathur (87-03-30) Document No: IRG/WP/3447
- Artificial drying of impregnated wood by Marie-Louise Edlund (87-03-31) Document No: IRG/WP/3448
- Application of oscillating pressure to improve treatability of refractory species by Rolf-Dieter Peek (87-04-06) Document No: IRG/WP/3449
- Washboard effect: a surface deformation of spruce resulting from vacuum-pressure impregnation with water-borne preservatives by Hubert Willeitner & Richard J Murphy (87-04-06) Document No: IRG/WP/3450
- Copper based water-borne preservatives : the biological performance of wood treated with various formulations by Scarlette M Gray & David J Dickinson (87-04-06) Document No: IRG/WP/3451
- Copper-based water-borne preservatives: copper adsorption in relation to performance against soft rot by Patrick M S Rennie, Scarlette M Gray & David J Dickinson (87-04-06) Document No: IRG/WP/3452
- A bioassay of remedially treated pole material by John N R Ruddick & L Parker (87-04-09) Document No: IRG/WP/3453
- Simulation test of subchronic inhalation toxicity of TBTO vapours in the air by V Skubic, S Kobal, J Stupar, R Ajlec, J Koroščin & G Pečenko (87-04-13) Document No: IRG/WP/3454
- Pinus* and *Eucalyptus* fenceposts treated with creosote and solvex tar by hot and cold open-tank process by M V Baonza (87-04-22) Document No: IRG/WP/3455
- Raising of the grain and deformation of Scots pine (*Pinus sylvestris*) treated with water-based preservatives by Göran Hägglund & Tommy Sebring (87-04-22) Document No: IRG/WP/3456
- Practical experiments with Boracol 10 Rh used as a fungicide in the repair process after attack by the dry rot fungus (*Serpula lacrymans*) by J Bech-Andersen (87-04-27) Document No: IRG/WP/3458
- An investigation into the stability of TBTO in LOSP-treated radiata pine by Kevin Archer & Roger Meder (87-07-08) Document No: IRG/WP/3459
- Minutes of the meetings of Working Group III 'Preservatives and Methods of Treatment' held at Delawana Inn, Honey Harbour, Ontario, Canada during 18-22 May 1987 (87-09-09) Document No: IRG/WP/3460

- A study of salt imbalances observed in recycled copper/chrome/arsenic preservative solutions in commercial practice by V R Sonti, Suraj Sonti & B Chatterjee (87-10-26) Document No: IRG/WP/3461
- Wood preservation research in Tanzania: Priorities and challenges by Karanja K Murira & Ron Cockcroft (88-01-25) Document No: IRG/WP/3462
- Service life of pressure treated deckings of spruce in direct contact with the ground by J B Boutelje & T Sebring (88-02-01) Document No: IRG/WP/3463
- Evaluating possibilities of leaching of deltamethrin and TCMTB (insecticide and fungicide for protecting wood) by rain water or by soaking in water by J S Duguet & V Dartigues (88-02-03) Document No: IRG/WP/3464
- Failure of overhead power transmission and telecommunication poles in Tanzania: Causes, preventive and remedial measures by Karanja K Murira (88-02-10) Document No: IRG/WP/3465
- Preliminary modelling of methylisothiocyanate movement through Douglas fir transmission poles by A R Zahora, P E Humphrey & J J Morrell (88-02-12) Document No: IRG/WP/3466
- Recent developments in North American industrial wood preservation plants by John F Bridge (88-02-12) Document No: IRG/WP/3467
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- Comparison of the anti-fungal efficacy of Cobra with drill perforation on oscillating pressure treated spruce transmission poles - Laboratory test by Erwin Graf & Bruno Zraggen (88-02-15) Document No: IRG/WP/3469
- A study on the pressure impregnation of *Eucalyptus globulus* fence posts with CCA preservatives by Dario Reimão & Lina Nunes (88-02-15) Document No: IRG/WP/3470
- The potential of high pressure pulsation processes to treat white spruce lumber with water-borne preservatives by J P Hösli & J N R Ruddick (88-02-18) Document No: IRG/WP/3471
- In search of alternative anti-sapstain chemicals for use in Papua New Guinea by Andrew Oteng-Amoako (88-02-19) Document No: IRG/WP/3472

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by P J Robinson & J R J French (88-02-19) Document No: IRG/WP/3473

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Accelerated ageing of preservatives in treated wood by Marie-Louise Edlund, Björn Henningsson, Björn Jensen & Carl-Erik Sundman (88-02-24) Document No: IRG/WP/3476

Kerfing reduces checking in ACA-treated Western white spruce poles
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Facts or feelings to decide on wood preservation
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Remedial ground-line treatment of CCA poles in service. A progress report after 28 months' testing by Björn Henningsson, Henning Friis-Hansen, Aino Käärik & Marie-Louise Edlund (88-03-04) Document No: IRG/WP/3481

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Fundamentals on steam fixation of chromated wood preservatives by R-D Peek & H Willeitner (88-03-07) Document No: IRG/WP/3483

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The secondary treatment of creosoted electricity poles with fused boron rods by D J Dickinson, P I Morris & Brian Calver (88-03-14) Document No: IRG/WP/3485

Creosoted radiata pine by non-pressure methods
by M V Baonza and C de Arana (88-03-16) Document No: IRG/WP/3486

Less pollution due to technical approaches on accelerated steam fixation of chromated wood preservatives
by H Willeitner & R-D Peek (88-03-14) Document No: IRG/WP/3487

Creosote immersion treatments in fence posts of *Castanea sativa*, *Pinus nigra* and *Pinus halepensis*
by C de Arana & Angeles Navarette (88-03-16) Document No: IRG/WP/3488

Hot and cold treatment in fence posts of *Eucalyptus globulus*, *Castanea sativa*, *Pinus nigra* and *Pinus pinaster*
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The effect of pretreatment on the impregnation of air-dried Belgian spruce
by Joris van Acker & Marc Stevens (88-03-25) Document No: IRG/WP/3490

Working Group IV

Chemical analyses of IRG/COIPM international marine test samples by Liam E Leightley
(87-03-17) Document No: IRG/WP/4114

IRG/COIPM INTERNATIONAL MARINE TEST. The effect of timber substrate on the effectiveness of different preservatives in sea-water - Final report of a collaborative field trial
by Rodney A Eaton (87-02-16) Document No: IRG/WP/4133

Trust in the durability of preserved wood during and after the reclamation of the Zuiderzee
by Herman Visscher (87-02-21) Document No: IRG/WP/4134

Sphaeroma terebrans Bate: A note on distribution and preservative tolerance in Florida coastal waters by Bruce R Johnson, Ernest D Estevez & Stanley A Rice (87-02-26) Document No: IRG/WP/4135

Micromorphological and chemical changes of archaeological woods from wrecked ship's timbers
by Yoon Soo Kim (87-03-02) Document No: IRG/WP/4136

Marine testing of selected waterborne preservatives by John N R Ruddick (87-03-16) Document No: IRG/WP/4137

Information from COIPM Wood Group. Summary from John R DePalma (U.S.A.) (87-06-01) Document No: IRG/WP/4139

Minutes of the 14th Joint Meeting with the COIPM Wood Group held at Delawana Inn, Honey Harbour, Ontario, Canada during 18-20 May 1987 (87-08-28) Document No: IRG/WP/4140

Summary of development of pile wrapping in Los Angeles Harbour by George Horeczko (87-08-20) Document No: IRG/WP/4141

Species pairs in the Teredinidae by Ruth D Turner
& C B Calloway (87-08-28) Document No: IRG/WP/4142

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Natural resistance of twenty-six Guianese wood
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marine environment. 1st Interim Report
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by Anna Gambetta (88-03-11) Document No: IRG/WP/4146

Other Documents

Abstracts of some papers promised for IRG 18
(87-02-09) Document No: IRG/WP/5279

IRG Foundation Fund Report for 1986 by Björn
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IRG Secretariat Financial Statement for the year
ending 31 December 1986
by Henning Friis-Hansen (87-03-25) Document No: IRG/WP/5282

The Sixteenth Report of the International
Research Group on Wood Preservation 1986-1987
by R Cockcroft (87-03-31) Document No: IRG/WP/5283

Abstracts received for Poster Sessions at IRG 18
Meeting (87-04-14) Document No: IRG/WP/5285

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IRG and its Members and Sponsors
(87-10-01) Document No: IRG/WP/5306

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(88-01-08) Document No: IRG/WP/5310

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Document No: IRG/WP/5323

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Addendum Documents either in the press or awaiting distribution

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Northern oak wood and its damages in Iran by Davoud Parsapajouh & Parviz Niloufari (1988-04-24)

Document No: IRG/WP/1377

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Preventive insecticidal activity against the house longhorn beetle by Jean-Brice Simonin & Damien Radtke

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Tunnelling ability of subterranean termites through termiticide-treated soil by Susan C Jones (1988-04-25)

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Document No: IRG/WP/2315

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IRG Secretariat
Drottning Kristinas väg 47C
S - 114 28 Stockholm
Sweden

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