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REPORT ON THE THIRTEENTH ANNUAL CONFERENCE OF THE INTERNATIONAL RESEARCH GROUP ON WOOD PRESERVATION

CESME, IZMIRE, TURKEY

(held May 23-28, 1982)

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This meeting was well attended by over 100 scientists from 26 countries. The five-day program was most exciting and provided much information of interest to Canada and the CWPA.

The following areas of research are rapidly expanding and should be followed closely in the coming years.

THE DEVELOPMENT AND USE OF FUNGAL CELLARS, ACCELERATED FIELD SIMULATORS, OR FACILITIES FOR ACCELERATED BIODETERIORATION

Twenty such facilities are now in use around the world and are providing excellent results on the use of existing and new wood preservatives. The factor of accelerated attack would seem to be between 5 - 15 times. It should be noted that almost all centres of excellence in wood preservation research around the world now have some developed research in this area (Australia, New Zealand, England, Sweden, West Germany and the USA). Unfortunately, we do not have a suitable facility in Canada. One was proposed by Forintek [Facility for Accelerated Biodeterioration (FAB)] several years ago, but financial support is still unavailable. These accelerated test facilities are being used for studying new preservatives, soft-rot attack of treated wood, poles, posts, lumber, and panel products. Data from this type of test structure will surely be required in the future by standards and approval agencies, for example CSA 080 and Pesticide Registration, CDA, Ottawa.

SOFT ROT DECAY OF TREATED AND UNTREATED WOOD PRODUCTS

It is believed that all treated wood products will ultimately fail due to deterioration by soft rot fungi. A great research effort is developing in this area, not only in hardwoods, which are particularly susceptible to soft rot, but also in softwoods. Most wood preservative evaluations today involve a soft rot test, which can be

done conveniently by using an accelerated field simulator. In Sweden soft rot is causing serious decay of utility poles treated with waterborne salts, both superficially and deeper within the poles. A similar situation could be expected within Canada and should be anticipated with suitable research.

NON-DESTRUCTIVE TESTING OF POLES

Further data was presented on the use of the Pilodyn to detect decay, particularly on Eucalyptus poles in Australia. This would confirm its value for the measurement of superficial soft rot in poles and even suggest that a low-joule model might be useful for field stake evaluation. The work on wood stave tanks by Forintek caused interest because of the possibility of its use for measuring internal decay.

THE DESCRIPTION AND IDENTIFICATION OF FUNGI FROM FIELD TESTS

The high cost of such research was recognized and there was a general lack of support for research in this area. It was suggested that the group concentrate on fungi colonizing specifically treated wood, for example, wood treated with CCA. Only the Swedish group volunteered to pursue this vital area, although all agreed that continued effort in fungal identification was essential.

THE CORROSION OF METAL IN CONTACT WITH TREATED AND UNTREATED WOOD

This was identified as a major area of concern and papers were requested for 1983. A paper illustrating results from the Forintek laboratory studies was requested.

THE PROTECTION OF UNSEASONED AND KILN-DRIED LUMBER

The search for chemicals to control sapstain, mould and decay in packaged lumber was discussed in several papers. New developments are in the use of mixed chemicals, since single chemicals are not performing adequately. The possible combined use of physical methods with liquid chemicals was stressed by the group. The continued movement away from chlorinated phenols by Scandinavia and other countries is still occurring. The failure of chemicals in some countries, while succeeding in others, supports the viewpoint, held by Forintek, that field evaluation of new chemicals should take place in the country (or location) of future use.

TROPICAL WOOD PRESERVATION AND PROTECTION

This will be a major theme at the next (1983) meeting of the IRG in Australia. The tropics were described as "one big fungal cellar", and the rapidity of stain and mould attack of fresh-felled logs and cut boards was described. Cooperative research in this area of tropical protection would seem highly possible.

THE DEVELOPMENT OF ACCELERATED BIOLOGICAL TESTING FOR NEW PRESERVATIVES

Cooperative tests already underway were described. Further work in an attempt to provide standardized tests for use around the world was requested by the group. This could have significant impact on the approval and registration of new chemicals for use in Canada (as well as other countries). Collaborative tests out of ground contact were described, particularly for the evaluation of window joinery. This is of importance to the CSA Wood Window standard, which currently requires modification.

THE QUANTITATIVE ASSESSMENT OF FIELD STAKES AND COMPUTERIZED PROGRAMS

This large area was discussed at several points in the meeting and the need for cooperative work was stressed. Dr. J.N.R. Ruddick and Mr. C. Ralph, from Canada, should be able to provide good input into this area.