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INTERESTING FUNGI FROM WOOD PRODUCTS

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At the Forintek Canada Corp. Westham Island test site, studies are now underway to name, characterize, and understand the fungi associated with treated and non-treated stakes and poles. Because of the mild and moist (some would say very wet) weather in Vancouver, B.C. this test site provides conditions for fungal growth, and wood decay and deterioration, as excellent as any testing site in North America, in spite of its northern latitude. The mild weather speeds up the testing process for new preservatives as it favors fungal activity.

Sometimes in biology, just as in physics, for every action there seems to be an equal and opposite reaction, albeit extremely complex. Thus, for every preservative treatment for wood, there are then established selective phenomena for and against certain kinds of fungi and other micro-organisms. Not surprisingly we are finding certain fungal species associated with particular treatments.

One fungus, which is well known to mycologists, but less well known to wood preservationists, is called Sistotrema brinkmanii. This fungus has perplexed biologists on numerous occasions because of its genetic complexity. Even less is known about its ecological role in nature or its role in wood deterioration yet it is very commonly found on wood products in B.C. - including shingles and shakes.

Two other "non-decay" fungi that have been isolated and tentatively identified are the moulds Humicola dimorphospora and Oidiodendron chlamydosporicum. H. dimorphospora was found very commonly on stakes treated with 2-(thiocyanomethylthio)benzothiazole [TCMTB]. This fungus was first isolated from soil collected south of Stoughton, Saskatchewan, in 1967. The other mould, O. chlamydosporicum, was first isolated from boreal forest soil near Candle Lake, Saskatchewan. Heretofore the fungi were known only from their original collecting localities except for a Sardinian isolate tentatively disposed as H. dimorphospora at the American Type Culture Collection. These fungi, as well as many others that are being isolated, could play an important role in Canada, in the preservation industry, from the standpoint of wood deterioration and/or preservative deterioration. Many produce spores that would facilitate their use as test organisms.

Additional studies and confirmation of the above identifications are now in progress in this important area of research.