

MARKET ISSUES RELATING TO BLUE-STAIN CAUSED BY OPHIOSTOMATOID FUNGI

Adnan Uzunovic and Tony Byrne

Forintek Canada Corp. Durability and Protection, 2665 East Mall, Vancouver, B.C. Canada, V6T 1W5.

adnan@van.forintek.ca

Wood discolorations can be non-microbial or microbial in origin. The latter are the more prevalent, with blue-stain being the most common, especially on softwoods. Blue-stain is largely caused by Ophiostomatoid fungi and may cause economic losses due to downgrade of the wood. Questions have been asked about other properties of stained wood and if they differ from normal sound wood. Researchers have found no significant differences in strength. Scientists in western Canada have studied properties of blue-stained wood due to the recent large mountain pine beetle (*Dendroctonus ponderosae*) infestation. Sapwood of lodgepole pine trees gets quickly stained by fungi associated with the beetle. Large volumes of blue-stained trees will remain standing or stored as logs for a number of years. Consumer acceptance, long-term storage and deterioration, manufacturing of lumber, plywood and oriented strand board (OSB), effect of stain in finished products and diversifying current end uses are issues being studied in this wood. Wood products may be susceptible to fungal infestation, including moulds, if the wood remains moist. Over the last decade, mould in human dwellings has become a high profile issue especially in North America. Moulds have been suspected of causing ill health, resulting in legal and legislative actions. Because blue-stain fungi are commonly mistaken for mould blue-stained wood is directly affected by high profile publicity about moulds. In addition questions arise about blue-stain fungi and health issues and whether handling and building with stained wood is safe. There are no reports that link human ill health with true blue-stain fungi. The international spread of invasive organisms is increasingly recognized as a major issue by governments, plant health regulatory agencies and the general public. This has led to discussions of the practical implication and possibility of live blue-stain fungi being carried on wood products to other countries and potentially becoming pests.