

Technical Reports

BC Coastal Forest Sector Hem-Fir Initiative

Enhanced Durability of Western Redcedar: Reducing Extractives Stain in Shingles – Project Status Report

Program:	Coastal Cedar Focus	Project No.:	C.03
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Abstract

One of the aesthetic challenges that western red cedar (WRC) shingles face is extractives stain, particularly in unpainted sidewall applications. Treatment with a mixture of quaternary ammonium compounds and alkyl amine oxides has been shown to reduce extractive stain in WRC lumber. Dip and pressure treatments with these chemicals on WRC shingles were investigated. After three months of winter exposure no extractive stain was present on any of the samples, including the untreated controls. Longer exposure time is needed to evaluate the efficacy of these treatments. Extractives analysis confirmed the association between light colour and thujaplicins, and found a similar correlation with compound B (recently identified as plicatin).

Keywords: Alkyl amine oxides, Extractives stain, Quaternary ammonium compounds, Shingles, *Thuja plicata*, Western redcedar

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