

A coat of paint just might banish the beetle's blues

FORESTRY INNOVATION INVESTMENT

No. MDP 2007-019

Uppdale
MOUNTAIN PINE BEETLE

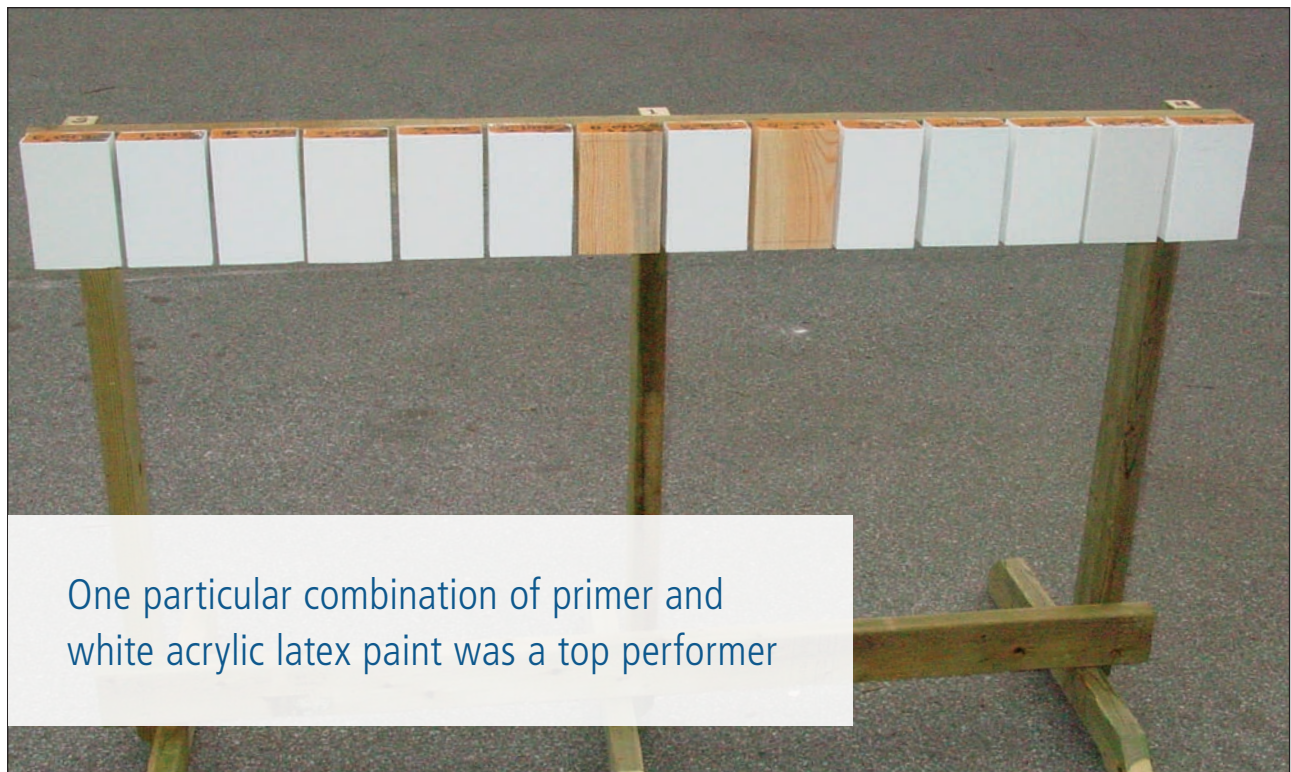
Research shows the bluestain associated with beetle-affected wood can be managed in a variety of ways by manufacturers for whom product appearance is a critical issue.

Scientists at UBC's Centre for Advanced Wood Processing say, in a 2007 research report, that paint is an attractive option for masking bluestain in non-structural products used indoors. The challenge, however, lies in finding paint types and combinations that retain this ability when exposed to the elements.

Tests were run on bluestained boards that were given coatings of primer and a series of opaque, white, acrylic and alkyd paints. Samples were placed outdoors for nine

months and then measured for colour, gloss, and physical changes in the wood itself. One particular combination of primer and white acrylic latex paint was a top performer in retaining its characteristics – good news for manufacturers wishing to mask discolouration with opaque paint.

Opaque finishes are currently being tested on bluestained wood at various stages in the decay process. The MPB wood samples, which had been dead for either one, three or six years, were first treated with a water repellent preservative (consisting of parafin wax, varnish and solvent). Primer and two top coats of either opaque, white, acrylic or alkyd finishes were then applied. These samples are



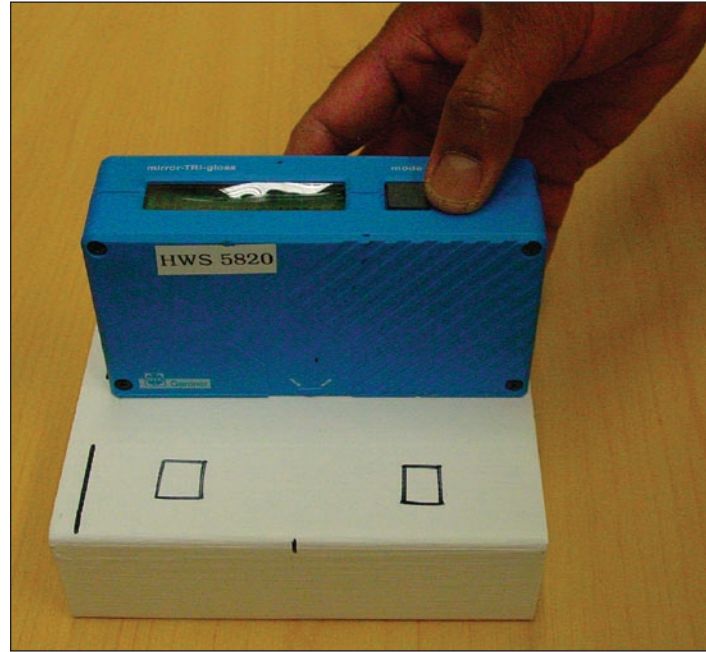
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currently undergoing the outdoor weathering process, and test results will be available in due course.

The ultimate outcome, researchers say, will be information that can be used to optimize the finishing of bluestained lodgepole pine with opaque finishes. "This will allow manufacturers of painted wood products to continue to use mountain pine beetle-affected wood with cost savings for their production processes."

Earlier research has shown that bluestained wood is more permeable and more dimensionally stable during repeated wetting and drying cycles than non-bluestained wood. In studies on alternative ways of dealing with bluestain, it was found that a solution of up to 10.5% of sodium hypochlorite sprayed on bluestained lodgepole pine at 20°C. is effective at removing much of the discoloration, although overall wood appearance darkens with the treatment.



FOR THE FULL REPORT GO TO WWW.BCFII.CA/MPB/
AND DOWNLOAD THE REPORT "MPB-07-019:
FINISHING MPB AFFECTED WOOD"

Forestry Innovation Investment is a British Columbia government corporation investing in initiatives to help market BC forest products and promotes our sustainable forest practices to the world. FII's Mountain Pine Beetle Program supports the government's Mountain Pine Beetle Action Plan and its objective to maximize the economic value of mountain pine beetle wood. FII does this through marketing activities and research into new products and manufacturing processes for mountain pine beetle wood.

For more information, go to www.bcfii.ca or contact

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