



Oregon Wood Innovation Center

Connecting People, Ideas, and Resources

Controlling Mold & Sapstain in Logs & Lumber

Comments & Questions during
Roundtable Discussion

Participant Comments/Questions

- TIME is the bottom line (minimize time from harvest to log yard through mill)
- What is the average moisture content in stems at harvest time?
- Is Copper 8 available?
- What is the impact of fire weather on amount of time to get logs from woods to mill?
- Use paper-backed lumber wrap for export material
- Anyone treat lumber between mill & planer?
 - No – will remove treatment at planer
 - How about (water) sprinkling lumber?

Participant Comments/Questions

- What about treating logs in log yard?
- Anyone treat/spray chips for stain?
- Would mills reject 'dirty' logs?
- Mold/stain forms fast in feller-buncher piles and right-of-way decks
- Risk of leaving lumber rough – mold won't plane off
- Temperature limit for sprinkling log decks = >40 deg. F
- How best to store surfaced green lumber (covered or not?)
 - Need good airflow

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What can OSU do?

- Host another workshop
- Mill studies/case studies tracking effects of timing (stump to mill to planer, etc.)
- Determine target log age by season to minimize mold & stain
- Algae formation on sprinkled logs?

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Testing anti-stain products

- The paper by Love et al. (on CD provided to participants) on sapstain tests is the most recent one in the collection. We use 1 by 4 because it tends to have more sapwood and we cut out any existing stain. We set up dipping tanks using 4 inch diameter PVC pipes (3 feet long) attached to plywood stands. That allows us to minimize solution use (and waste to dispose of). We dip half of each board for 30 seconds then allow to drain before stacking the boards (treatments all on one side) in stacks of 10. We usually treat 20 boards per treatment and we create stacks of 8 to 10 treatments. We surround the stacks with completely untreated boards to act as a buffer (so the treated boards do not dry out). So there is a line of untreated lumber on the top, bottom and sides of a stack. We evaluate stain visually on each half of the boards (treated/untreated) 1, 3, and 6 months after treatment- on a scale from 0 (none) to 100 % (completely toasted). Generally, we view 10-20% as unacceptable staining. Since each board has an untreated half, you can tell whether any control was due to chemical action or just poor staining conditions.

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