Effect of Natural Weathering and Accelerated Aging on *Pinus* sp.

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INTRODUCTION

This study compared accelerated and natural weathering methods and characterized the changes of wood with two surface coatings compared to control wood.

MATERIAL AND METHODS

The Pinus wood, were overthrow from homogeneous plantations of Rio Grande do Sul state, in southern Brazil.

15 specimens of the test piece of dimensions 150 x 95 x 25 mm were obtained. 5 samples were treated with Spray Prime bright white colour (Finish 1), ink Synthetic enamel in bright white colour (Finish 2) and five untreated controls.
RESULTS AND DISCUSSION

Figure 1. Colour changes of wood of *Pinus* sp. exposed to two weathering treatments.
## Results and Discussion

Table 1. Roughness changes of wood of Pinus sp. exposed to natural and accelerated aging.

<table>
<thead>
<tr>
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<th>Weathering in the natural (days)</th>
<th>Climatic chamber (hours)</th>
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<tbody>
<tr>
<td></td>
<td>0</td>
<td>180</td>
</tr>
<tr>
<td>Finish 1</td>
<td>2.46</td>
<td>8.07</td>
</tr>
<tr>
<td>Finish 2</td>
<td>2.52</td>
<td>3.88</td>
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</table>
RESULTS AND DISCUSSION

Figure 2 Effect of colour changes of parameter L*, a* and b* of wood of Pinus sp. with different finishes.
CONCLUSION

It could be concluded that the results of climatic chamber are satisfactory for the assessment of wood of Pinus sp. in southern Brazil for performance natural weathering and accelerated aging.

REFERENCES

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