

## Preservation of Historical Zelkova carpinifolia Wooden Structure in Humid Weather

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**Abstract :** This study aims to identify suitable conservative product for the conservation and restoration of historical Zelkova Carpinifolia wood located in humid weather. The superficial properties and hardness of 14 compounds treated with several consolidants were compared. The consolidants have been applied alone, with synthetic resin or with protein glues and natural resins by the brushing method. Colorimetric measurements, observation methods and hardness tests were conducted before and after aging to verify the possible changes of the treated wood and the consolidating resistance. The compound 1:2 of Butvar B98 and sandarac in 5% ethanol was found to be more effective, providing a suitable compound compared to the other consolidants tested.

**Keywords :** Zelkova carpinifolia, consolidation, synthetic resin, penetration depth, hardness

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