



Research article

## In situ study on the settlement of biofoulers employing wooden test panels

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### Abstract

The aim of this study is to analyze the antifouling properties of different timbers, and thus to identify the wood which shows the most antifouling activity. The chemical component present in that wood which is responsible for its antifouling property can be extracted and used in the manufacture of natural antifouling paints, thus saving the marine environment from the effects of heavy metal antifouling paints. Wood species used in this study were, 1) *Tectona grandis* 2) *Prosopis juliflora* 3) *Strychnos nux-vomica* 4) *Lagerstroemia microcarpa* 5) *Mangifera indica* 6) *Artocarpus hirsutus* 7) *Milicia excelsa* 8) *Swietenia mahagoni* 9) *Anigre* 10) *Terminalia arjuna* 11) *Artocarpus heterophyllus* 12) *Albizia lebbek* 13) *Acacia mangium*. Four sets of panels were exposed for a period of 1 month and 20 days. The identification of fouling organisms obtained from wooden panels revealed the presence of 5 species belonging to Barnacles, Tubeworms, Bivalves, Bryozoans, and Hydroids. The study showed promising results, out of the thirteen species of wood used in the study, it was found that *Albizia lebbek* and *Lagerstroemia microcarpa* showed the most biofouling resistance. The chemical extracts from these wood can be used in the preparation of environmental friendly antifouling coatings.