

**BIOFOULING GROWTH RESISTANT ASSESSMENT OF DIFFERENT
MATERIALS USING FIELD TEST METHOD IN PULAU TUBA,
LANGKAWI**

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ABSTRACT

BIOFOULING GROWTH RESISTANT ASSESSMENT OF DIFFERENT MATERIALS USING FIELD TEST METHOD IN PULAU TUBA, LANGKAWI

Many studies have been conducted over the years to find the best coating and material that can compete with efficient, cost-effective, but toxic antifouling coatings. The purpose of this study is to investigate the various materials that are suitable for resisting biofouling growth and to compare the materials used by calculating the percentage of biofouling attachment occurring on its surface. This particular project will be beneficial in furthering the research on materials with antifouling properties and anti-biofouling surfaces. The experiment was carried out by placing an experimental raft with plate samples (Twill Weave Glass Fibre-Chopped Strand Mat Glass, Twill Weave Basalt Fibre-Chopped Strand Mat Glass, WillKAT (tensile) and WillKAT (flexural)) and fibre samples (Unidirectional Basalt Fibre, Woven Glass Fibre, Twill Weave Basalt Fibre, And Chopped Strand Mat Glass Fibre) in a real marine environment at Pulau Tuba, Langkawi, Kedah, Malaysia. The results obtained show that the best materials are Woven Glass Fibre with the average percentage of biofouling attachment (2%) with the rank of fouling (3) by day 49, and Chopped Strand Mat Glass Fiber with the average percentage of biofouling attachment (4%) with rank of fouling (4) by day 28, indicating that it has significant antifouling properties based on the comparison between all samples.