

عنوان مقاله:

A Preliminary Field Study of Antifouling Paint Performance After Short Exposure in Mandara Bali, Indonesia

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خلاصه مقاله:

Antifouling paints are applied to prevent the growth of marine biofouling. In Indonesia, that paint is widely used for ship which commonly used copper-based biocide. In fact, there is no or little comprehensive studies on antifouling paint in Indonesia compared to other tropical countries. In this study, the evaluation of the performance for antifouling paint was carried out where anticorrosion paint and bare steel were also studied as references. The measurement of corrosion rate on steel was conducted by weight loss method. The panels containing specimens were exposure up to 1-month for immersion in different depth of sea up to 3 meters. Seawater parameters consisting of temperature, pH, salinity, conductivity and dissolved oxygen were measured as well as coating properties. The results showed both surfaces of anticorrosion paint and steel specimens covered by biofouling, but not on antifouling paint. There also is not much different in antifouling paint properties before and after exposure in various depth of sea. The reduction of thickness for antifouling paint is apparently predominant to be affected by sea current. The magnitude of corrosion rate on bare steel is almost the same in different depth of sea which took place due to the effect of dissolved oxygen and biofouling. In the future, the comparison of the paints performance all local regions is necessary to be conducted in all local regions of the Indonesia.

کلمات کلیدی:

Antifouling paint, Anticorrosion paint, biofouling, weight loss, corrosion, Salinity

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