

## Anti-biofouling Property of Urushiol and its Derivatives Impregnated in Polydimethylsiloxane Matrix

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Lacquer has been used as an excellent varnish in Asia traditionally. Recent studies show that lacquer has properties for durability and antimicrobial effects. We expect that lacquer will be a good candidate for antifouling agent to solve the environmental problem caused by the current antifouling agents. In this work, polydimethylsiloxane(PDMS) matrices have been prepared after impregnation with urushiol and its derivatives, where urushiol has been obtained from the sap of natural lacquer trees. The anti-biofouling effect will be shown by XXT(2, 3-bis(2-methoxy-4-nitro-5-sulfohenyl)-2H-tetrazolium-5-carboxanilide)-reduction assay of biofilm formation by bacteria on matrix surfaces.