ANTIMICROBIAL ACTIVITY OF SOME NATURAL DYES

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ABSTRACT

ANTIMICROBIAL ACTIVITY OF SOME NATURAL DYES

The present study was taken up an exploratory study to test some natural dyes inherent antimicrobial activity with a view to develop protective clothings dyed with these. Three natural dyes Gelenggang leaf-Cassia alata, Tumeric -Curcuma Longa Linnaeus and Temu lawak -Cucuma Xanthorrizha were used and tested against common pathogen Staphylococcus aureus, Pseudomonas aeruginosa and Bacillus subtilis. In addition this study also compared the effect of the extraction methods (superheated water extraction and boiling extraction) on the antimicrobial activity of the dyed materials. The three mordants that were used in this project are Alum {Aluminum Potassium Sulfate}, Dried Paddy husk (Oryza sativa) and Lime (Calcium Carbonate). The results showed that natural dyes using SWE extraction have good in antimicrobial activity compared using to those of the boiling extraction.