목재문화재 보존을 위한 수목 추출물의 항균활성에 관한 연구

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Antimicrobial activities of Wood Extracts for conservation of wooden artifacts

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animals, Wooden biologically artifacts are degraded by insects, micro-organisms. Especially, deterioration by fungi infestations is one of the most significant. We focused on the evaluation of the antifungal properties of wood extracts to control deterioration of wooden cultural properties. Eleven crude extracts isolated from each part of eight spices of tree were investigated for their inhibitory activities against the three brown-rot fungi, Coniophora puteana, Postia placenta and Lentinus lepideus; the three moulds, Aspergillus niger, Penicillium chrysogenum and Trichoderma viride. We performed susceptibility test using diffusion method and agar dilution method with crude extracts. Eleven extracts inhibited and decreased growth of most rot fungi. Among them, Coniophora puteana was particularly inhibited hyphal growth except Betula platyphylla var. japonica stem and bark mixture, whereas, moulds were not influenced by all extracts.