

Synthesis and antifungal activity of sulfides, sulfoxides, and sulfones based on (1S)-(-)- β -pinene

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Abstract

Attachment of 2-mercaptoethanol and thioglycolic acid methyl ester to the double bond of (1S)-(-)- β -pinene yielded pinane sulfides with the cis configuration. Oxidation of sulfides with m-chloroperbenzoic acid yielded the corresponding sulfoxides and sulfones. The resulting compounds were screened for antimycotic activity and the dynamics of changes in antifungal properties in sulfides-sulfoxide-sulfone series were studied. © 2010 Springer Science+Business Media, Inc.

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Keywords

and sulfones, antifungal activity, Pinane sulfides, sulfoxides