In Vitro antimycotic activity of xanthorrhizol isolated from *Curcuma xanthorrhiza* Roxb. against opportunistic filamentous fungi

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Abstract

Xanthorrhizol was isolated from the rhizome of *Curcuma xanthorrhiza* (Zingiberaceae) and its *in vitro* activity against opportunistic filamentous fungi was evaluated using the NCCLS (M38-A) standard method. Xanthorrhizol was found to be active against all the species tested, namely *Aspergillus flavus*, *Aspergillus fumigatus*, *Aspergillus niger*, *Fusarium oxysporum*, *Rhizopus oryzae* and *Trichophyton mentagrophytes*: the MICs being 2.0, 2.0, 2.0, 4.0, 1.0 and 1.0 µg/mL, while the MFCs were 4.0, 4.0, 4.0, 8.0, 2.0 and 2.0 µg/mL, respectively. The susceptibility of six species of filamentous fungi to xanthorrhizol was comparable to that of the commercial antifungal, amphotericin B. Xanthorrhizol also has activity to inhibit the conidial germination of all tested species. The results strongly suggest that xanthorrhizol can be developed as a natural antifungal agent. Copyright © 2007 John Wiley & Sons, Ltd.

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Keywords

antifungal • *in vitro* • opportunistic fungi • xanthorrhizol