Antifungal Activity of Resveratrol Derivatives against Candida Species

Titre	Antifungal Activity of Resveratrol Derivatives against Candida Species
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Résumé en anglais	*trans*-Resveratrol **(1a)** is a phytoalexin produced by plants in response to infections by pathogens. Its potential activity against clinically relevant opportunistic fungal pathogens has previously been poorly investigated. Evaluated herein are the candidacidal activities of oligomers **(2a, 3–5)** of **1a** purified from *Vitis vinifera* grape canes and several analogues **(1b–1j)** of **1a** obtained through semisynthesis using methylation and acetylation. Moreover, *trans*-ε-viniferin **(2a)**, a dimer of **1a**, was also subjected to methylation **(2b)** and acetylation **(2c)** under nonselective conditions. Neither the natural oligomers of 1a **(2a, 3–5)** nor the derivatives of **2a** were active against *Candida albicans* SC5314. However, the dimethoxy resveratrol derivatives **1d** and **1e** exhibited antifungal activity against *C. albicans* with minimum inhibitory concentration (MIC) values of 29–37 μg/mL and against 11 other *Candida* species. Compound **1e** inhibited the yeast-to-hyphae morphogenetic transition of *C. albicans* at 14 μg/mL.
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Liens
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