Med Chem Res (2010) 19:33–57
DOI 10.1007/s00044-009-9170-3

MEDICINAL CHEMISTRY RESEARCH

ORIGINAL RESEARCH

Aryloxyacetic esters structurally related to α-Asarone as potential antifungal agents

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Received: 22 August 2008 / Accepted: 6 February 2009 / Published online: 20 March 2009

Abstract A series of aryloxyacetic ester analogues **8–13** was synthesized based on the potential pharmacophores of the antifungal agents α-Asarone (**1**) and **2–5**. Their antifungal activity was tested in vitro for their growth inhibitory activities against pathogenic fungi. The in vitro antifungal evaluation of these alkyl and aryl esters shows that derivatives **10** displayed the highest antifungal and fungicidal activities against *Cryptococcus neoformans* and *C. gattii*. These results support the idea that the phenoxyacetic frame is a potent pharmacophore for the design of potential antifungal drugs.

Keywords α-Asarone · Antifungal activity · *Cryptococcus neoformans* var. *neoformans* · *Cryptococcus gattii* · Phenoxyacetic frame

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