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Isolation and Synthesis of 1’-S-1’-Acetoxycavicol Acetate as Potent Antidandruff Agent

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Abstract : The air-dried and powdered methanol solvent extraction of the rhizomes of Alpinia galangal is subjected to bio-assay guided fractionation and isolation yielded a known compound namely, 1'-S-1'-Acetoxychavicol acetate (1). The isolated known compound has been identified based on the physical, spectral data (IR, ^{1}H, ^{13}C, NMR and mass spectroscopy) and comparison with an authentic sample. Finally isolated 1'-S-1'-Acetoxychavicol acetate (1) was confirmed by synthesis. The crude methanol extract and identified known compound (1) were tested for antidandruff property against Malassezia furfur showed with MIC 1000 µg/mL and 7.81 µg/mL, respectively.

Keywords : Alpinia galanga, isolation, 1'-S-1'-Acetoxychavicol acetate, antidandruff activity, Malassezia furfur
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