

# Synthesis of Montroumarin

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A simple stereoselective synthesis of montroumarin [(3*S*)-6,8-dihydroxy-3-phenyl-3,4-dihydroisocoumarin] isolated from *Montrouziera sphaeroidea* has been achieved. Condensation of benzoyl chloride with 3,5-dimethoxyhomophthalic acid afforded 6,8-dimethoxy-3-phenylisocoumarin (**3**) which on sequential saponification and esterification yielded the keto ester **5**. Enantioselective reduction of the latter with baker's yeast directly furnished the (3*S*)-6,8-dimethoxy-3-phenyl-3,4-dihydroisocoumarin (**6**) in good enantioselectivity which on demethylation provided montroumarin. All of the synthesized compounds were examined *in vitro* for antifungal activity.

*Key words:* Montroumarin, Dihydroisocoumarin, Antifungal