

Journal of the Chinese Chemical Society, 2005, 52, 1191-1199

Synthesis and Some Reactions of Coumarin-3-yl Crotononitrile Derivatives

G. H. Tamam, H. M. Bakeer,* R. M. Abdel-Motelab and W. A. Arafa
Chemistry Department, Faculty of Science at Fayoum, Cairo University, El-Fayoum, Egypt

Abstract

Several new coumarinyl crotononitriles, **2a-i**, coumarinyl cinnamocoumarines **3a,b**, 4-amino-3-(substituted)-3,4-dihydrocoumarin **4a-c** and **9a-c**, nicotinic acid derivatives **10a,b** and 4-ethoxy-3-substituted-3,4-dihydrocoumarins **11**, were synthesized from 3-acetyl and/or 3-benzoyl coumarin. The behavior of coumarin-3-yl crotononitriles **2a,b** toward some electrophilic and nucleophilic reagents have been described with the aim of preparing some new heterocyclic compounds.