



البحث الثالث

"A Facile Synthesis of Novel Heterocyclic Compounds with Anticipated Antibacterial Activities Based on Coumarin Moiety"

Authors: Asmaa Kamal Mourad, Fathia Korany Mohamed, and Ahmed Yousef Soliman

Journal Information: *HETEROCYCLES*, 2018, 96 (1), 50-66

ISSN: 0385-5414 (Print) 1881-0942 (Online)

Impact factor: 1.036

Abstract:

A novel series of coumarin derivatives has been disclosed by allowing 2-amino-nicotinonitrile derivative **1** to undergo alkylation, diazotization, and condensation reactions. Moreover, different reagents, such as thiourea, phenyl isothiocyanate, carbon disulfide, ethylenediamine, and hydroxylamine hydrochloride, have been exploited to synthesize more coumarin derivatives, aiming to increase the synthetic potential of coumarin and study the antibacterial activities of the newly-synthesized compounds.