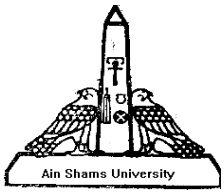

Ain Shams University
Faculty of Education
Department of Chemistry

Approval Sheet

"Chemical Reactivity of some substituted 6,8-dimethylchromones towards some nucleophilic reagents"

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Salsabeel Housam Mohamed

This work is dedicated

to

soul of "my father"

my mother, my husband, my son,

my brother and my sisters

بسم الله الرحمن الرحيم

قُلْ إِنَّ صَلاتِي وَنُسُكِي وَمَحْيَايَ
وَمَمَاتِي لِلَّهِ رَبِّ الْعَالَمِينَ(١٦٢) لاَ شَرِيكَ لَهُ
وَبِذَلِكَ أُمِرْتُ وَأَنَاْ أَوَّلُ الْمُسْلِمِينَ(١٦٣)

سورة الأنعام
صدق الله العظيم

Contents

Aim of the work

The present work aims to:

1. Synthesis of a variety of 3-substituted 6,8-dimethyl chromones.
2. Study the chemical reactivity of the synthesized 3-substituted-6,8-dimethylchromones towards a variety of nucleophiles.
3. Elucidate the reactivity of the electrophilic centers of the synthesized compounds.
4. Characterization of the newly synthesized compounds using elemental analysis and different spectroscopic techniques.
5. Evaluate the antimicrobial activity of the newly synthesized compounds.

Abstract

Abstract

"Chemical Reactivity of some substituted 6,8-dimethylchromones towards some nucleophilic reagents"

Salsabeel Hossam Mohammed Hashiem

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A variety of 3-substituted-6,8-dimethylchromones have been synthesized and characterized. The chemical reactivity of the synthesized 3-substituted-6,8-dimethylchromones was studied towards some nucleophilic reagents. A diversity of products was efficiently synthesized depending on the type of the electron withdrawing group present at position 3 of the chromone ring as well as the reaction conditions. Structures of the new synthesized products were deduced on the basis of their analytical and spectral data. The newly synthesized compounds were evaluated for their in vitro antimicrobial activity

Keywords: 3-Substituted-6,8-dimethylchromones, ring transformations, heterocyclization, nucleophilic reagents, cyclocondensation.

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