



Faculty of Education
Chemistry Department

**A THESIS
Entitled**

**Synthesis and Biological Activity of Some New
Thienopyrimidine Derivatives**

Submitted by

Osama Farouk Mohamed Ibrahim

M.Sc. (Organic Chemistry) 2011

For the degree of

**Ph.D. for Teacher's Preparation in Science
(Organic Chemistry)**

Department of Chemistry
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Under the supervision of:

1-Prof. Dr. Magdy Hamed El-Metwally Seada
Professor of Organic Chemistry, Department of Chemistry,
Faculty of Education, Ain-Shams University.

2- Prof. Dr. Mohamed Abdel-Megid Abdel-Hamid
Professor of Organic Chemistry, Department of Chemistry,
Faculty of Education, Ain-Shams University.

3- Dr. Kamelia Mohamed El-Mahdy
Assistant Professor of Organic Chemistry, Department of
Chemistry, Faculty of Education, Ain-Shams University.

4- Dr. Azza Mohamed Mohamed El-Kazak
Assistant Professor of Organic Chemistry,
Department of Chemistry, Faculty of Education, Ain-Shams
University.



Faculty of Education
Department of Chemistry

Approval Sheet:

Name of Candidate: **Osama Farouk Mohamed Ibrahim**

Degree: **Ph.D. for Teacher's Preparation in Science
(Organic Chemistry)**

Thesis Title: **Synthesis and Biological Activity of Some New
Thienopyrimidine Derivatives**

This thesis has been approved by:

Approved

Prof. Dr. Magdy Hamed El-Metwally Seada

.....

Prof. Dr. Mohamed Abdel-Megid Abdel-Hamid

.....

Dr. Kamelia Mohamed El-Mahdy

.....

Dr. Azza Mohamed Mohamed El-Kazak

.....

Prof. Dr. Ali Taha

.....

Head of Chemistry Department,
Faculty of Education,
Ain Shams University

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Abstract

Synthesis and Biological Activity of Some New Thienopyrimidine Derivatives

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The present work describes the synthesis of some new condensed and isolated heterocycles containing thienopyrimidine moiety as potential antimicrobial agents using 3-amino-2-methyl-5,6,7,8-tetrahydro[1]benzothieno[2,3-*d*]pyrimidin-4(3*H*)-one (**1a**) and 3-amino-2-thioxo-2,3,5,6,7,8-hexahydro[1]benzothieno[2,3-*d*]pyrimidin-4(1*H*)-one (**1b**) as starting materials for their preparation.

Structure elucidation of the newly synthesized thienopyrimidines has been deduced from elemental analyses and spectral data (IR, ¹H NMR, ¹³C NMR and mass spectrometry).

Key Words:

Thienopyrimidines, antimicrobial applications

Supervisors:

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SUMMARY