

**SYNTHESIS AND SPECTRAL STUDIES
ON HETEROCYCLIC NITROGEN
COMPOUNDS.**

Thesis

Submitted for The Degree of (Ph.D)

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1996



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Acknowledgment

The author wishes to express her deep thanks and gratitude to ***Prof.Dr.A.F.Fahmy.***, head of chemistry department and professor of organic chemistry, Chemistry department, Faculty of Science, Ain Shams University, for suggesting the problem, valuable discussion and criticism.

The author also wishes to express her gratitude to ***Prof.Dr. Hoda Abdel-Hamid***, Prof of organic chemistry, Faculty of Science, Ain Shams University, for her encouragement, valuable help, and criticism during the progress of the work.

Thanks to ***Prof.Dr.G.A.Mina***, Prof. of organic chemistry, Faculty of Education, Alexandria university, for his supervision and encouragement.

Thanks to ***Prof.Dr. Raifa.A.Hassanein*** Prof. of physiology, Botany department. Faculty of Science, Ain Shams University, for the great help in the biological part.

Abstract

Synthesis and spectral studies on Heterocyclic Nitrogen Compounds

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**Unpublished Doctor of Philosophy
Dissertation,
Ain Shams University, Abbassia,
Cairo, Egypt**

The main purpose of this work is to synthesise heterocyclic rings like benzoxazones, oxadiazoles, imidazolidines, triazolines, thiadiazoles, quinazolines, and pyrimidines starting from :-

2-Cyano-4'-hydroxy-3'-methoxy cinnamoyl, azide, acid chloride and isothiocyanate were used as precursors for the synthesis of these heterocyclic systems.

A full spectral study using Infrared, ^1H NMR and Mass spectroscopy on all the synthesised heterocyclic systems, was performed.

Biological activity of some of the prepared heterocycles such as pyrimidines, imidazolidines, triazolines, as well as diaryl urea and diaryl thiourea were studied and prove that, all of them have hormonal nature.

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List of Tables

<i>Table</i>	<i>Page</i>
1. Chemical shifts (δ ppm) of (6a-c).....	61
2. Chemical shifts (δ ppm) ^{13}C NMR of (6a).....	62
3. Chemical shifts (δ ppm) of (7a-c).....	64
4. Ions and their relative abundance of (8a).....	83
5. Ions and their relative abundance of (8b).....	86
6. Ions and their relative abundance of (8c).....	89
7. Ions detected from (8a-c) and their relative abundance.....	92
8. Ions and their relative abundance of (10).....	95
9. Ions and their relative abundance of (13).....	98
10. Ions and their relative abundance of (18).....	101
11. Ions and their relative abundance of (19).....	104
12. Ions and their relative abundance of (22).....	109
13. Ions and their relative abundance of (24).....	114
14. Ions and their relative abundance of (27).....	119
15. Ions and their relative abundance of (28a).....	124
16. Ions and their relative abundance of (29b).....	127
17. Ions and their relative abundance of (28b-29c).....	132
18. Growth of <i>Hordeum</i> coleoptile section as affected by different concentrations..... of compounds (6a and 10).....	136
19. Growth of <i>Hordeum</i> coleoptile section..... as affected by different concentrations.....	

of compound (22).....	137
20. Growth of Hordeum coleoptile section.....	
as affected by different concentrations	
of compounds (28a, 29b and 28b = 29c).....	138
21. Characterisation data of diarylureas (6a-c).....	142
22. Melting points and mixed melting points	
of compounds (6a-c).....	143
23. Characterisation data of anilides (7a-c).....	144
24. Characterisation data of imidazolidinones (8a-c).....	146
25. Characterisation data (28a, 29b, 28b=29c).....	158

CONTENTS

	<i>Page</i>
SUMMARY.....	i
INTRODUCTION.....	1
<u>PART I</u>	
CHEMISTRY OF ORGANIC AZIDES.....	1
PREPARATION OF AZIDES.....	1
A- Carbamoyl azides.....	1
B- Acid azides.....	3
CHEMICAL REACTIONS OF ORGANIC AZIDES.....	6
1- Decomposition reactions.....	6
A- Mechanism of decomposition reactions.....	6
B- Types of decomposition reactions.....	11
2- Acid catalysed decomposition.....	16
SPECTROSCOPIC STUDIES ON ORGANIC AZIDES.....	20
<u>PART II</u>	
ISOTHIOCYANATES IN HETEROCYCLIC SYNTHESIS.....	22
INTRODUCTION.....	22
SOME BASIC CONSIDERATION.....	22
SYNTHESIS OF ISOTHIOCYANATES.....	25
1- Synthesis of alkyl and aryl isothiocyanates.....	25

2- Synthesis of acyl isothiocyanates.....	35
ISOTHIOCYANATES IN HETEROCYCLIC SYNTHESIS.....	36
1- Synthesis of four-membered heterocycles.....	36
2- Synthesis of five-membered heterocycles.....	37
3- Synthesis of six-membered heterocycles.....	45
4- Synthesis of seven-membered heterocycles.....	50
5- Synthesis of benzo-heterocycles.....	50
6- Synthesis of tricyclic-heterocycles.....	51

DISCUSSION

AIM OF THE WORK.....	53
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CHAPTER I

DECOMPOSITION REACTIONS OF 2-CYANO-4'-HYDROXY-3'-METHOXY CINNAMIC ACID AZIDE.....	55
---	----

SYNTHESIS OF 2-CYANO-4'-HYDROXY-3'-METHOXY CINNAMIC ACID AZIDE.....	55
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DECOMPOSITION REACTIONS OF 2-CYANO-4'-HYDROXY-3'-METHOXY CINNAMOYL AZIDE.....	57
---	----

1- Decomposition with aromatic amines.....	60
2- Decomposition with anthranilic acid.....	67
3- Decomposition with hydrazines.....	72
A- Decomposition with phenyl hydrazine.....	72
B- Decomposition with benzoyl hydrazine.....	73

CHAPTER II

E.I MASS SPECTRAL STUDY.....	81
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CHAPTER III

THE USE OF 2- CYANO - 4'- HYDROXY-3'-METHOXY CINNAMOYL ISOTHIOCYANATES IN HETEROCYCLIC SYNTHESIS.....	105
Synthesis of 2-cyano-4'-hydroxy-3'-methoxy cinnamoyl isothiocyanates.....	105
I- REACTION OF ISOTHIOCYANATE WITH PHENYL HYDRAZINE.....	106
Synthesis 1-phenyl-5-[2'-(4"-hydroxy-3"-methoxy) cinnamionitrile]-1,2,4-triazoline-3-thione.....	106
II- REACTION OF ISOTHIOCYANATE WITH BENZOYL HYDRAZINE.....	111
Synthesis of 2-phenyl-5-[N-2'-cyano-(4"-hydroxy- 3"methoxy)-cinnamide] 1,3,4-thiadiazole.....	112
III- REACTION OF ISOTHIOCYANATE WITH ANTHRANILIC ACID.....	116
Synthesis of 3-[2'-cyano-(4"-acetate-3"-methoxy) cinnamoyl] quinazolin-4-one-2-thione.....	117
IV- REACTION OF ISOTHIOCYANATE WITH AROMATIC AMINES.....	121
V- REACTION OF ISOTHIOCYANATE WITH GLYCINE.....	134
Synthesis of 1-carboxymethyl-3H-5-(4'-hydroxy-3'-methoxy) phenyl methylene-6-imino-hexahydropyrimidine-4-one-2 thione.....	134

CHAPTER IV

BIOLOGICAL ACTIVITY.....	135
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FIGURES

EXPERIMENTAL139

REFERENCES160

ARABIC SUMMARY