



* والله أخرجكم من بطون أمهاتكم لا تعلمون شيئاً

وجعل لكم السمع والأبصار

والأفئدة لعلكم تشكرون(78)*

سورة النحل

صدق الله العظيم

Dedication

Dedicated to:

My father's soul.....

My mother.....

My brother.....

And sister.....

Acknowledgment

Thanks to Almighty Allah for helping me to finish this research, without whose help this work would have been difficult if not impossible to accomplish.

I would like to express my deep gratitude to my supervisor Prof. Mohamed Abdel Karim Mohamed for his guidance, patience and valuable advice.

I am indebted to all those who have supported me and helped me during this work, particularly Dr. Aldesogi Omer Hamed and Dr. Abdelfatah Mohamed Ahmed- Elneelain University.

Thanks are also extended to all my friends for their invaluable support. In particular I feel indebted to someone whose words pushed me to continue this work and to go on.

Finally, I acknowledge (DAAD). The research has received funding from the Deutscher Akademischer Austausch Dienst (DAAD) - German Academic Exchange Service.

Abstract

This study was aimed to the synthesis of some phenolicMannich bases. The biological activity of the targeted molecules was then evaluated and most of the Mannich bases exhibited significant antibacterial and antifungal potential.

A general synthesis strategy was adopted, the active hydrogen compound, formalin and a secondary amine were mixed in ethanol for different intervals to afford the final products. In this way the following Mannich bases were synthesized:

- 1) 1(1-[(piperidin-1-yl) methyl] naphthalen-2-ol).
- 2) 2(3-(diethyl amino) naphthalen-2-yl acetate).
- 3) N,N-dimethyl-1-[(naphthalen-2-yl)oxy]methanamine.
- 4) 3-(hydroxymethyl)-1-[(morpholin-4-yl) methyl] naphthalen-2-yl acetate.
- 5) 3-(hydroxymethyl)-1-[(4-ethylpiperazin-1-yl) methyl] naphthalen-2-yl acetate.
- 6) (1-[(dibenzylamino) methyl] naphthalen-2-ol).
- 7) (2-(diethyl amino) phenyl acetate).
- 8) (2-[(dimethyl amino) methyl] phenol).
- 9) 4-{{3-(morpholin-4-yl)-2, 3-dihydro-1-benzofuran-3-yl} methyl} morpholine.
- 10)(2-[(dibenzylamino) methyl] phenol).
- 11)2-[(diethylamino) methyl] phenyl acetate.

- 12) 4-(7-methyl-2,3-dihydro-1-benzofuran-3-yl)morpholine.
- 13) 1-methyl-4-(7-methyl-2,3-dihydro-1-benzofuran-3-yl) piperazine.
- 14) Methylenebis (6-amino-2,1-phenylene) diacetate.
- 15) 2-amino-6-[(dipropylamino)methyl] phenol.
- 16) N,N-dibenzyl-1-(2,3-dihydro-1,3-benzoxazol-7-yl)methanamine.
- 17) [1-(4-ethylpiperazin-1-yl)-1,2-dihydronaphtho [2,1-b] furan-4-yl] methanol.

The constitution of the target molecules have been characterized by using a combination of spectral techniques (UV, IR, ¹HNMR and MS).

ملخص البحث

هدفت هذه الدراسة إلى تصنيع بعض قواعد مانيج الفينولية ومن ثم إجراء النشاط البيولوجي لها. وقد اتضح ان لبعض هذه القواعد فعالية عالية ضد الميكروبات. أستخدم لتحضير هذه المركبات طريقة عامة لتفاعلات مانيج تضمنت إضافة الفورمالين لخليط من مركب الهيدروجين النشط والأمين الثانوي وباستخدام الإيثانول كمذيب. وتركت المتفاعلات لفترات زمنية متفاوتة. وبهذه الطريقة تم تحضير قواعد مانيج التالية:

- 1) 1(1-[(piperidin-1-yl) methyl] naphthalen-2-ol).
- 2) 2(3-(diethyl amino) naphthalen-2-yl acetate).
- 3) N,N-dimethyl-1-[(naphthalen-2-yl)oxy]methanamine.
- 4) 3-(hydroxymethyl)-1-[(morpholin-4-yl)methyl]naphthalen-2-yl acetate.5)
- 3-(hydroxymethyl)-1-[(4-ethylpiperazin-1-yl) methyl]naphthalen-2-ylacetate.
- 6) (1-[(dibenzylamino) methyl] naphthalen-2-ol).
- 7) (2-(diethyl amino) phenyl acetate).
- 8) (2-[(dimethyl amino) methyl] phenol).
- 9) 4-{[3-(morpholin-4-yl)-2,3-dihydro-1-benzofuran-3-yl]methyl}morpholine.
- 10) 2-[(dibenzylamino) methyl] phenol).
- 11) 2-[(diethylamino) methyl] phenyl acetate.
- 12) 4-(7-methyl-2,3-dihydro-1-benzofuran-3-yl)morpholine.
- 13)1-methyl-4-(7-methyl-2,3-dihydro-1-benzofuran-3-yl)piperazine.
- 14) methylenebis(6-amino-2,1-phenylene)diacetate.
- 15) (2-amino-6-[(dipropylamino) methyl] phenol).

16) N,N-dibenzyl-1-(2,3-dihydro-1,3-benzoxazol-7-yl)methanamine.

17) [1-(4-ethylpiperazin-1-yl)-1,2-dihydronaphtho[2,1-b]furan-4-yl]methanol.

وتم تحديد البنية الكيميائية لهذه المركبات باستخدام مجموعة من التقنيات الطيفية (طيف الأشعة فوق البنفسجية، الأشعة تحت الحمراء، الرنين النووي المغناطيسي وطيف الكتلة).

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