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شبكة المعلومات الجامعية

جامعة عين شمس

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**PHYTOCHEMICAL STUDY OF SOME α,γ -PYRONE
AND TERPENS OF EXPECTED BIOLOGICAL
ACTIVITY**

A THESIS

540

**SUBMITTED
BY**

AMR EL-SAID ABD-EL-AZIZ
(M.Sc. in organic Chemistry 1997)

for
Ph.D. Degree (Chemistry)

**SUPERVISED
BY**

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**FACULTY OF SCIENCE
BENHA UNIVERSITY
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Submitted By : Amr El- Said Abd- El- Aziz

Supervisors

Signature

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AMR EL-SAID ABD-EL-AZIZ

SUMMARY

1- SUMMARY

The present work is concerned with the synthesizing and pharmacological testing of some new compounds using some naturally occurring substances as precursors (γ -pyrone, α -pyrone and Triterpene) .

1.1 . γ -Pyrone part

The representative example used in the present study is visnagin, where it were converted to visnagin-9-sulphonylchloride that reacted with 2ry cyclic alcohol and phenol derivatives to prepare the corresponding visnagin-9-sulphonic esters (IIa-c), these derivatives were subjected to the following reaction conditions.

1.1.1. Mannich reaction

The derivatives (IIa-c) were subjected to the condition of Mannich reaction it afforded the corresponding o-(Aryl)-4-methoxy-6-[(amino)-methyl]-7-methyl-5-oxo-5H-furo [3,2-g] [1] benzopyron-9-sulphonate (IIIa-i).

1.1.2. Reaction with hydroxyl amine hydrochloride

The derivatives (IIa-c) were reacted with hydroxyl amine hydrochloride which afforded the corresponding o-(Aryl)-6-hydroxy-4-methoxy-5-[4-methyl isoxazol-3yl]benzofuran-7-sulphonate (IVa-e).