الأية

قال تعالى :

(وَهُوَ الَّذِي أَنزَلَ مِنَ السَّمَاءِ مَاءً فَأَخْرَجْنَا بِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا بِهِ نَبَاتَ كُلِّ شَيْءٍ فَأَخْرَجْنَا مِنْهُ خَضِرًا تُخْرِجُ مِنْهُ حَبَّا تُرَاكِبًا وَمِنَ النَّخْلِ مِن طَلْعِهَا قِنْوَانٌ دَانِيَةٌ وَجَنَّاتٍ مِّنْ أَعْنَابٍ وَالزَّيْتُونَ وَالرُّمَّانَ مُشْتَبِهًا وَغَيْرَ مُتَشَابِهٍ الظُرُوا إِلَى تَمَرِهِ إِذَا أَتْمَرَ وَيَنْعِهِ أَنَّ فِي ذَلِكُمْ لَآيَاتٍ لِقُومٍ مُثَونَ) مُثْونَ)

صدق الأنعاء الاية (99)

Dedication

Dedicate this Work to:-

My Parents

Brother and Sister

Friends and Colleagues

Acknowledgement

First of all, I thank the almighty god for sustaining my life and giving me the strong will and power to continue my study

The completion of this research has been a result of both direct and indirect support of many people to whom I owe acknowledgement,

I extend my appreciation to my supervisor **Dr. Amani AbdAlrazig** for his monitoring guidance and for his critical comments from the beginning of the study to it's conclusion

Finally, I would like to thank Sudan University of Science and Technology college of Science Department of chemistry and to my all friends.

ABSTRACT

Phytochemical screening of neem leaves extract showed flavonoid compound . the neem leaves extract flavonoids whith 95% ethanol , that tested with chromatography technique as Thin Layer Chromatography with solvent system butanol : acetic acid : water (5:1:6), with separated flavonod compounds . Also the ethanol neem extract subjected to spectral studies as IR . neem extract tested antimicrobial activity , it showed moderate activity against both types of bacterial (gram +ve Bacteria is Bs , Sa) and (gram – ve Bactria Ec , Pa) and anti fungi (Ca) .

الخلاصة

وأظهر المسح الكيميائي لمستخلص أوراق النيم مركب الفلافونويد. وتم الحصول على ناتج خام عند استخلاص اوراق النيم ب% 95 من الايثانول, وتم عزل الفلافونيد وتنقيته بواسطه كروموتغر افيا الطبقة الرقيقة من المستخلص الايثانولي باستخدام المذيب بيتوتانول: حمض الخليك: ماء بنسبه (5:1:6), مستخلص النيم الايثانولي اخضع للدراسة طيف الاشعه تحت الحمراء, ولمضاد نشاط الميكروبات التي اظهرت نشاطها في كل من نوعين البكتريا الموجبة والسالبة والفطر.

Table of contents

	Subject	NO
	الاية	VI
	Dedication	VI
	Acknowledgement	VI
	Abstract	VI
	الخلاصة	VI
	Table of Contents	VI
_	List of tables	VI
	List of figures	VI
	Chapter one	
	Introduction	
1.1	Azadirachtaindica	1
1.1.1	Common names	1
1.1.2	Classification of Neem tree	1
1.1.3	Description of Neem tree	1
1.1.4	Chemistry of Neem	2
1.1.5	Use of Neem	2
1.2	Flavonoids	3
1.2.1	Chemical structure of flavonoids	3
1.2.2	Classification of flavonoids	5
1.2.2.1	Flavones	6
1.2.2.2	Flavonols	6
1.2.2.3	Flavanones	6
1.2.2.4	Flavanonols	7
1.2.2.5	Isoflavone	7

1.2.2.6	Neoflavonoids	7		
1.2.2.7	Anthocyanidins	7		
1.2.2.8	Chalcones	8		
1.2.3	Medicinal properties of flavonoids	8		
	Chapter two			
Experimental				
2.1	Material	9		
2.1.1	Chemical	9		
2.1.2	Instrumental use	9		
2.2	Method	9		
2.2.1	Collection of the plant material	9		
2.2.2	Preparation of Neem of extracts	9		
2.2.3	The extraction of flavonoids from Neem	9		
2.2.3.1	Thin-layer chromatography	9		
2.2.4	In vitro Antimicrobial activity	10		
2.2.4.1	Dilution methods:	10		
2.2.4.2	Determination of minimum inhibitory concentrations (MICs) by agar plate dilution method	11		
2.2.5	Testing of antibacterial susceptibility	11		
2.2.5.1	Disc diffusion method	11		
2.2.6	Preparation of bacterial suspensions	12		
2.2.7	Preparation of fungal suspension	12		
Chapter three				
Results and Dissection				
3.1	antibacterial and antifungal activities	13		
3.2	spectral data of flavonoid	14		
		İ		

Chapter four					
Reference					
4	Reference	19			

List of table	No
Table (1)	5
Table (2)	13
Flist of figures	
Figure (1)	3
Figure (2)	15
Figure (3)	16
Figure (4)	16
Figure (5)	17
Figure (6)	17
Figure (7)	18