

بسم الله الرحمن الرحيم

قال تعالى :

وَيَسْأَلُونَكَ عَنِ الرُّوحِ ۗ قُلِ الرُّوحُ مِنْ أَمْرِ رَبِّي وَمَا أُوتِيتُمْ مِنَ الْعِلْمِ إِلَّا قَلِيلًا ﴿٨٥﴾

صدق الله العظيم

سورة الإسراء الآية (85)

DEDICATION

I dedicate this work to:

- The Soul of my Mother.

- To my Father, Brothers, Sisters and my Friends.

- To my colleagues with love and gratitude

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Abstract

This study was designed with the objective of the determination of the antibacterial activity of leaves of *Nicotiana tabaccum* which was collected from Al Fasher city . Four reference strains of bacteria were used including two Gram -positive bacteria *Staphylococcus aureus* ,*Bacillus subtilis* and two gram- negative bacteria *Escherichia coli* , *Pseudomonas aeruginosa* .Four concentration of leaves extracts from water, acetone and ethanol of *Nicotainatabaccum* 12.5%, 25%, 50%, 100% were used testing of the extract for antibacterial activity was done on Nutrient agar media by using agar well diffusion method .Antibacterial activity was determined by measuring the diameter of zone of inhibition. Water extracts of all concentrations of leaves of *Nicotaina tabaccum* not caused inhibition zone against *Staphylococcus aureus* ,*Bacillus subtilis* *Escherichia coli* and *Pseudomonas aeruginosa* .Four concentrations of acetone extract were shown inhibitory effect against *Staphylococcus aureus*, and *Escherichia coli*, except *Bacillus subtilis* which shown inhibitory effect in the 100% concentration. while *Pseudomonas aeruginosa* showed resistance to all concentrations of acetone extract. Ethanol extract caused inhibition zone against *Staphylococcus aureus*, *Escherichia coli* whereas *Bacillus subtilis* (shown inhibitory effect in the 50%, 100% concentration) whereas *Pseudomonas aeruginosa* not shown resistance to all concentration of ethanolic extract.

المستخلص

هدفت هذه الدراسة لتحديد الفاعلية المضادة لمستخلص الماء والأسيتون والايثانول لأوراق التبغ لأربعة أنواع من البكتريا منها اثنين موجبة لصبغة جرام وهي العنقودية الذهبية والعصوية بثلس واثنين سالبة لصبغة جرام وهي الاشريشية القولونية والزائفة الزنجارية استخدمت اربع تراكيز من مستخلص الأسيتون والايثانول 12.5%، 25%، 50%، 100%. أختبر المستخلص للفاعلية المضادة للبكتريا في أوساط اجار مغذياستخدام طريقة الانتشار في الاجار المثقب في طبق بتري ، الفعالية ضد بكتريا حدد بقياس قطرمنطقة التثبيط بالمليمتر. أثبتت التجربة وجود نمو في المستخلص المائي لمستخلص نبات التبغ في البكتريا السالبة والموجبة لصبغة جرام.مستخلص الأسيتون لأوراق نبات التبغ أظهرت فعالية في تثبيط نموالعنقودية الذهبية والاشريشية القولونية في كل التراكيز . كما أظهرت أيضا فعالية فيالعصوية بثلس عند التركيز 100 % بينما لايجاد نمو في الزائفة الزنجاريةلكل التركيز.مستخلص الايثانول لاوراق نبات التبغ ايضا أظهرت فعالية في تثبيط نمو العنقودية الذهبية والاشريشية القولونيةفي كل التراكيز وأظهرت فعالية أيضا في العصوية بثلس عند التركيز 50% و100% . كما أظهرت وجود نمو في الزائفة الزنجارية في كل التراكيز.