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College of Veterinary Medicine

**Isolation and Identification of Common Saprophytic and None Saprophytic Aerobic Bacteria with studying the Sensitivity to Some Medicinal Plants**

Dissertation

Submitted to the Council of the College of Veterinary Medicine, University of Diyala

In Partial Fulfillment of the Requirements for the Degree of Bachelor of Veterinary Medicine and Surgery (BVMS)

By

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*بسم الله الرحمن الرحيم*

(لِلَّهِ مُلْكُ السَّمَاوَاتِ وَالْأَرْضِ يَخْلُقُ مَا يَشَاءُ يَهَبُ لِمَنْ يَشَاءُ إِنَاثاً وَيَهَبُ لِمَنْ يَشَاءُ الذُّكُورَ (49) أَوْ يُزَوِّجُهُمْ ذُكْرَاناً وَإِنَاثاً وَيَجْعَلُ مَنْ يَشَاءُ عَقِيماً إِنَّهُ عَلِيمٌ قَدِيرٌ (50)

صدق الله العظيم

سورة الشورى

(الآيات 49-50)

Supervisor Certification

We certify that this thesis entitled **(Isolation and Identification of Common Saprophytic and None Saprophytic Aerobic Bacteria with studying the Sensitivity to Some Medicinal Plants)** was prepared under our supervision at the Department of Medicine, College of Veterinary Medicine, University of Diyala, as partial fulfillment of the requirements for the Degree of Bachelor of Veterinary Medicine and Surgery (BVMS)

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/ / 2018

*Dedication*

*To*

*The greatest person in my life*

*My Mother*

*Aseel*

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Abstract

To isolate the saprophytic and none saprophytic aerobic bacteria, 18 adults, of either sex and of 1-2 kg b. wt. local breed rabbits were dependent for the current study. Swabs from mouth, nose, ear, skin and urinary tract external orifice (vagina in female and prepuce in male) were collected and submitted to routine bacterial procedures isolation, through culturing on blood and nutrient agar, followed by gram stain examination, and fixing the macromorphological characters of colony. Then accordingly submitted to further micromorphological examination by culturing on specific media and carrying the specific biochemical tests according to the suspected isolates.

These isolates were examined for their sensitivity to ethanol: aqueous (70:30) extract of Pomegranate peel, *Melia azedarach* stem, *Lantana cammara* fruits*, L. cammara* flowers and *L. cammara* leaves using well agar diffusion method.

The results of current study showed that the most common isolates were Staphylococcus, Streptococcus, Pseudomonas, Klebsiella, Bacillus and *E. coli*. The ethanol: aqueous extract of Pomegranate peel and *Lantana cammara* leaves were showed the best inhibitory effects.

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**جمهورية العراق**

**وزارة التعليم العالي والبحث العلمي**

**جامعة ديالى**

**كلية الطب البيطري**

**عزل وتميز البكتريا الهوائية المعايشة والممرضة مع دراسة حساسيتها للمستخلص الايثانول : الماء لبعض النباتات الطبية**

مشروع بحث

قدم الى مجلس كلية الطب البيطري ، جامعة ديالى

كجزء من متطلبات الحصول على درجة البكلوريوس طب وجراحة بيطرية

من قبل الطالبة

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تحت اشراف

**الاستاذ الدكتور نزار جبار الخفاجي**

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**الخلاصة**

لعزل البكتريا الهوائيىة التعايشية والممرضة ، اخضع 18 ارنبا محليا، بالغ، من كلا الجنسين ، وبوزن 1-2 كغم للفحص من خلال اخذ مسحة من الفم، والمنخر، والاذن ، والجلد ، والفتحة الخارجية للجهاز البولي . تم الزرع على اكار الدم واكار المغذي ، تبع بالصبغة بصبغة كرام ، ثم زرع على اوساط خاصة حسب العزلة المتوقعة واجريت الاختبارات الكيميوحيوبة حسب العزل.

من العزل التي تم عزلها المكورات العنقودية ، المكورات السبحية ، الاشريكا قولون ، الكلبسيلة ، العصويات ، الزوائف.

اخضعت هذه العزلات الى اختبار الحساسية لمستخلص الايثانول : الماء للب الرمان ، اغصان الميليا ازيدراج ، المينا الشجرية الثمار ، والاوراق، والزهور. بطريقة الانتشار الحفر في الاكار.

اظهرت النتائج ان اعلى العزلات كانت الايشريكا قولون من ثم المكورات العنقودية . وان الحساسية كانت الاعلى للمستخلص الايثانول : الماء للب الرمان واوراق المينا الشجرية .