

# بسم الله الرحمن الرحيم





# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

## قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها  
علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



## يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار





# بعض الوثائق الأصلية تالفة

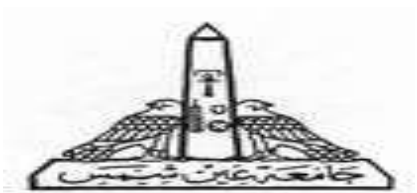






بالرسالة صفحات  
لم ترد بالأصل





**Biochemistry Department  
Faculty of Science  
Ain Shams University**

# **Protective Effect of *Moringa olifera* Extract against Rimactazid induced Hepatotoxicity in Rats**

## **A Thesis**

“Submitted for the degree of Master in Science as a  
Partial Fulfillment for requirements of the Master Degree in Science”

By

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**2020**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

رَبِّ أَشْرَحْ لِي صَدْرِي ﴿٢٥﴾

وَيَسِّرْ لِي أَمْرِي ﴿٢٦﴾

وَاحْلُلْ عُقْدَةً مِّن لِّسَانِي ﴿٢٧﴾

يَفْقَهُوا قَوْلِي ﴿٢٨﴾

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## ***Declaration***

This thesis has not been submitted for a degree at this or any other university.

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I would like to give the reward of this work to the soul of my mother, may God bless her soul.

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## ***Abstract***

Hepatotoxicity, the most important problem worldwide gets the most attention from scientists as it considered a lethal disease. It arises as a side effect of many drugs, Alcohol abuse, liver malfunction and others. Rimactazid<sup>R</sup> (Rim<sup>R</sup>) is the first line drug for tuberculosis causes hepatotoxicity. Our study asses the hepatoprotective effect of *Moringa olifera* (MO) leaves water extract towards the hepatotoxicity induced by Rim<sup>R</sup> in rats. Eighty – eight rats (100-120g) were divided into 10 groups (7 rats for normal, drug, Moringa extract only (200 and 1600 mg) groups and 10 rats for Moringa extract&drug with different methods of administration for each group). Co-administration of *Moringa oleifera* with Rim<sup>R</sup> reduced the elevated serum alanine aminotransferase (ALT), aspartate aminotransferase (AST), alkaline phosphatase (ALP), gamma glutamyl transferase (GGT), total protein, total bilirubin levels, triglyceride (TG), cholesterol (CHOL), High-density lipoprotein (HDL- cholesterol), Low-density lipoprotein (LDL), creatinine, urea, malondialdehyde (MDA) and total antioxidant capacity (TAC). However, it elevated the reduced albumin. Histopathological examination of MO extract groups showed the reduction in liver damage happened by Rim<sup>R</sup> administration.