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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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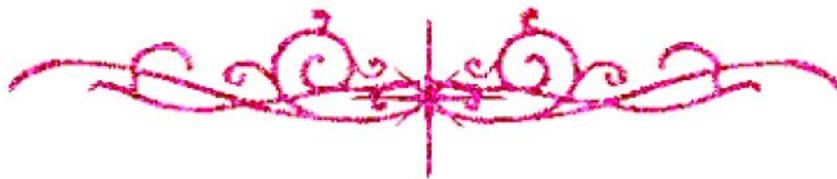


بعض الوثائق الأصلية تالفة





بالرسالة صفحات لم ترد بالأصل



BIOLOGICAL ACTIVITY OF MORINGA PLANT

By

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B. Sc. Agric. Sc. (Biotechnology), Ain-Shams University, 2013

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Approval Sheet

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ABSTRACT

Khadiga Khaled Ali Ali Montaser: Biological activity of Moringa Plant. Unpublished M.Sc. Thesis, Department of Agricultural Biochemistry, Faculty of Agriculture, Ain Shams University, 2020.

Moringa oleifera plant is documented as active pharmaceutical agent with high antioxidant activity. The present study aims to investigate and evaluate the protective and beneficial effects of different *Moringa Oleifera* plant extracts. The investigated extracts were ethanolic leaves extract (ELE), aqueous leaves extract (AQLE), ethanolic seeds extract (ESE) and aqueous seeds extract (AQSE). Silymarin (SIL) was used against chemotherapy (cyclophosphamide (CYP)) to avoid and decrease its harmful side effects. Seventy males of albino rats were divided into seven groups as follows: 1) control group - received distilled water orally; 2) CYP group - cyclophosphamide was given twice (15th and 30th day) at a dose of 150 mg/kg through intra-peritoneal (i.p.). All other 5 groups were injected with CYP as in group 2. Additionally, group 3 (ELE + CYP) group - rats were administered with ELE at dose of 500 mg/kg/day orally through an intra-gastric tube for consecutive 7 days before and 7 days after CYP injection. 4) AQLE+CYP group – AQLE at dose of 500 mg/kg/day orally was given for consecutive 7 days before and 7 days after CYP injection. 5) ESE+CYP group – ESE at dose 500 mg/kg/day orally was given for consecutive 7 days before and 7 days after CYP injection. 6) AQSE+CYP group – AQSE at dose of 500 mg/kg/day orally was given for consecutive 7 days before and 7 days after CYP injection. 7) SIL+CYP group - Rats were administered with SIL at dose of 100 mg/kg/day by gavage for consecutive 7 days before and 7 days after CYP injection. One day after the last treatment, blood samples and livers were collected for histopathological investigations and for some biochemical determinations. Results revealed that, hematological analyses and different blood biochemical determinations (e.g. AST, ALP, ALT, CPK, LDH enzymes, glucose, lipid profile, creatinine, uric acid, urea & lipid peroxidation

level) significantly increased ($P < 0.05$) in CYP group, compared to control group, while total protein, albumin, HDL and uric acid were decreased compared to the control group and other groups. Histopathologically, lots of various hepatocytes damage observed in CYP induced group compared with the control group and other groups. In conclusion, Moringa leaves extracts exhibited antioxidant activity by the presence of free radical quenching scavenger constituents which protect against harmful side effects of cyclophosphamide, especially ethanolic leaves extract.

Keywords: Moringa leaves extract, Moringa seeds extract, cyclophosphamide, silymarin, rats.

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