



International Journal of ChemTech Research CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555 Vol.9, No.09 pp 156-168, 2016

## Phytochemical detection and Therapeutical properties of *Moringa oleifera* leaves

## Ayman Y. Amin<sup>1</sup>; El Tobgy, K.M.K.<sup>2</sup> and Abdel Salam, Hemat, S.<sup>2</sup>

<sup>1</sup>Plant Physiology Department, Faculty of Agriculture, Cairo University. <sup>2</sup>Medicinal and Aromatic Plants Research Department, Horticulture Research Institute, A. R. C., Egypt

**Abstract :** This study was undertaken to determine the hypoglycemic effect of *Moringa oleifera* leaves water extract in normal (normoglycemic) and induced diabetic rats. Hyperglycemia was induced in rats using alloxan (120 mg/kg body weight). Healthy and Diabetic rats were treated with 100, 200, 300 or 400 mg/kg b.wt.) *Moringa oleifera* water extract, 3 times a week over a period of 4 weeks, and the antidiabetic effects of the extracts were evaluated by measuring changes in the biochemical parameters within the blood serum. Results illustrated that all doses of the extract provided a significant reduction in serum glucose where, the aqueous extracts (100, 200, 300 and 400 mg) exhibited a substantial reduction in glucose levels in diabetic rats, starting from value of 388-728 mg/kg b.wt. For the diabetic rats and decreased ranging from 43.19, 70.04, 70.65, and 72.07 %, respectively for the aforementioned extracts of Moringa leaves. The *Moringa oleifera* leaves extract caused a gradual improvement in kidney function, which neared the functional normality when compared to the untreated control-group. Therefore, the present study suggests that pre-treatment of *Moringa oleifera* leaves extract has a positive effect in lowering the lipid profile for diabetic rats.

Ayman Y. Amin *et al* /International Journal of ChemTech Research, 2016,9(9),pp 156-168.

\*\*\*\*