

11th International Conference on

Childhood Obesity and Nutrition

March 15-16, 2018 | Barcelona, Spain

Phytochemical study and antioxidant activity of some anti-diabetic plants in the Wilaya of Mascara

Ould Yerou Karima, Righi S, Belhocin A, Mekness A, Meddah B and Tir Touil A
University of Mascara, Algeria

An ethnobotanical survey of 40 individuals in the Wilaya of Mascara identified 40 medicinal plants used for the treatment of diabetes mellitus. Among these plants, *Malva sylvestris*, *olea europaea sylvestris*, *Citrus aurantium* have been selected. The objective of our work is the phytochemical study and the antioxidant activity of the three plants selected. The raw methanolic extracts of *Malva sylvestris* and their stems, *olea europaea sylvestris* and *Citrus aurantium* were obtained by the extraction method: maceration. The quantitative determination of total polyphenols by the Folin–Ciocalteu method and the flavonoids in the presence of AlCl₃, the total polyphenol content in *Malva sylvestris* and their stems, *olea europaea sylvestris* and *Citrus aurantium* represents 556.33 µg EAG/g MS and 443.33 ug EAG/G Ms; 557.66 gEAG/g Ms 447.77 µgEAG/gMS. The content of flavonoids is 1032.33 µg EQer/g Ms 898.66 ug EQer/g Ms 894.33, µg EQer/g Ms 1428.33 µgEQer/g MS. Antioxidant activity of the extracts prepared was measured by two methods. The first is the use of free radical 1,1-diphenyl-2-picrylhydrazyl (DPPH) and the second is reducing power of FRAP iron. These methods show that these plants have good antioxidant activity.

mhanine11@yahoo.fr