

Study of the effect of extraction solvent on the content of total phenolic, total flavonoids and the antioxidant activity of an endemic medicinal plant growing in Morocco

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Abstract

Aromatic and medicinal plants are used by man for different needs including food and medicinal needs for its biological properties attributed mainly in phenolic compounds and for its antioxidant capacity.

In our study, the aim is to compare three extraction solvents by evaluating the contents of phenolic compound, the contents of flavonoids and the antioxidant activities of extracts from different methods of extracting the aerial part of an endemic medicinal plant from Morocco. This activity was also confirmed by three methods (2,2-diphenyl-1-picrylhydrazyl (DPPH), Antioxidant Reducing Power of Iron (FRAP) and Total Antioxidant Capacity (CAT)). The results showed that this plant is rich in polyphenols and flavonoids, as well as it have a very important antioxidant capacity whatever the solvent or the extraction method. This suggests the importance of using extracts from this plant as a new natural source of food additives and potent antioxidants in the food industry.the entire amount of water descends over a small area with catastrophic force all of a sudden and causes mass destruction. The topographical conditions such as steep hills favour the formation of these clouds. This leads to flash floods, landslides, soil erosion, soil sealing and negative changes in soil properties non- conducive for proper crop growth.

Biography

Basma AGHOUTANE obtained her master's degree at the age of 23 at Mohamed V university, faculty of sciences of Rabat in the field of analytical chemistry and environment. Today at the age of 26, she is a fourth-year

doctoral student in the laboratory of plant chemistry and organic and bioorganic synthesis on the subject of the contribution to the valorization of endemic aromatic and medicinal plants in Morocco.