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Determination of Antioxidant Activities of Sumac (Rhus Coriaria) Extracts with Different Solvents

Authors: F. T. Senberber, N. Tugrul, E. Moroydor Derun

Abstract : As a nutraceutical, sumac (Rhus Coriaria) was extracted by using different solvents of methanol, ethanol, and water. The DPPH (2,2-diphenyl-1-picryl-hydrazyl-hydrate) method of free radical scavenging capacity was used to determine the effects of solvent on antioxidant activities of the plant. The total phenolic content was studied by The Folin Ciocalteu Reagent method. The antioxidant activities of extracts exhibit minor changes in different solvents and varied in the range of 84.3–86.4 %. The total phenolic contents are affected by the selected solvent. The highest total phenolic content was determined at the liquid phase of water and it was estimated as 26.3 mg/g in gallic acid.

Keywords: DPPH, solvent, sumac, total phenolic content

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