

Phenolic content and antioxidant activities of *Vitis vinifera* L. leaf extracts obtained by conventional solvent and microwave-assisted extractions

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Description :

Grapevine leaves are used in the cuisines in the countries surrounding the Mediterranean and in folk medicine. They contain a huge amount of phenolic constituents. To optimize the extraction of bioactive compounds present in grapevine leaves, two methods of extraction were compared: conventional solvent extraction (CSE) and microwave-assisted extraction (MAE). The optimal extraction conditions in term of total phenolic content (TPC) were determined using a Box–Behnken design (BBD) from leaves of *Vitis vinifera* L. cv. Le tizourine Bou Afraraet. Optimal extraction conditions for CSE was 29% concentration of ethanol (v/v), 30.96 min extraction time, and 72: 1 liquid-to-solid ratio (mL: g), at 37.5 C. For MAE it was 34% concentration of ethanol (v/v), 474 W microwave power, 47 s irradiation time and 40: 1 liquid-to-solid ratio (mL: g). Both extracts obtained by optimized MAE and CSE processes were compared in ...

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