

Project	Enhancement of Extraction Potential on Antioxidant Activity from Pomegranate seeds (<i>Punica granatum</i> Linn.) using by Maceration
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Abstract

This study aimed to select an optimum ethanol concentration combined with citric acid used for maceration extraction of pomegranate seed to obtain high antioxidant activity of pomegranate seeds extract. The varied solvents for extraction were 60 %, 70 % and 80 % of ethanol concentrations combined with 1 ml, 2 ml and 3 ml of citric acid 3 %. The antioxidant activities, through the ABTS and DPPH assays, of pomegranate seeds extracts were determined. The results showed that increasing the ethanol concentrations increased both antioxidant activities of pomegranate seeds extracts. The extract of the seed from using 80 % of ethanol concentration combined with 3 ml of 3 % of citric acid exhibited the highest antioxidant activity showing 5.28 mg/ml of IC₅₀ of the DPPH assay; however, the highest IC₅₀ of the ABTS assay of the seeds extracts showing 5.05 mg/ml was obtained from 80 % of ethanol concentration combined with 1 ml of 3 % of citric acid.

Keywords Maceration Ethanol Citric acid Pomegranate seeds Antioxidants