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<u>TOP</u> > <u>Available Issues</u> > <u>Table of Contents</u> > Abstract	

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Phenolic Content and Radical Scavenging Capacity of Kaffir Lime Fruit Peel Extracts Obtained by Pressurized Hot Water Extraction

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The effects of the pressurized hot water extraction (PHWE) parameters (extraction temperature: 100, 150 and 200°C and extraction time: 5, 10 and 15 min) on the total phenolic content and DPPH radical scavenging capacity of the kaffir lime (*Citrus hystrix*) fruit peel extracts were investigated. Both indices increased as the extraction temperature increased. The extraction time only slightly affected the values. This study also demonstrated that the PHWE produced extracts with a higher phenolic content and radical scavenging capacity than that obtained by a conventional extraction method (water and 60% methanol at 50°C, 1 h).

Keywords: <u>Kaffir lime</u>, <u>pressurized hot water extraction</u>, <u>subcritical water extraction</u>, <u>DPPH scavenging capacity</u>, <u>antioxidant activity</u>, <u>response surface</u>



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