

عنوان مقاله:

Changes in anti-oxidant activity of *Thymus transcaspicus* (Klokov) during growth and developmental stages

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خلاصه مقاله:

Antioxidant activities protect the cell against oxidative agents that are constant metabolic by-products. The aim of this study was to investigate the relationship between harvesting time of *Thymus transcaspicus* and its antioxidant activities. The plant samples were harvested 5 times in different growth phases from 17 April to 22 July 2008, and its antioxidant activity was studied using the ferric reducing antioxidant power (FRAP), 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical scavenging activity, and β -carotene bleaching (BCB) assays. The results of FRAP assay indicated that the reduction activity of the plant was in the highest level in stage 5 of sampling. The result of DPPH assay showed that the crude extract of the plant was more capable of DPPH radical scavenging in stage 2. The highest level of gallic acid and quercetin in the crude extract of *T. transcaspicus* was determined as 85.29 ± 6.22 mg and 18.88 ± 0.9 mg in stage 2, respectively. Therefore, stage 2 was the optimum time to harvest the *T. transcaspicus*

کلمات کلیدی:

Thymus transcaspicus, antioxidant capacity, growth stages, total phenolic content, total flavonoid content

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