

Title In vitro antioxidant activities of the methanol extracts of five *Allium* species from Turkey
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Abstract

This study was designed to examine the in vitro antioxidant activities of the methanol extracts of five *Allium* species, namely *Allium nevsehirense*, *A. sivasicum*, *A. dictyoprosum*, *A. scrodoprosum* subsp. *rotundum* and *A. atroviolaceum*; the former two are endemic for the Turkish flora. The extracts were screened for their possible antioxidant activities by two complementary tests; DPPH free radical-scavenging and β -carotene/linoleic acid assays. In the first case, non-polar subfractions of the extracts did not show any antioxidant potential, while the polar subfractions exhibited marked activity. Among the polar ones, the most active one was *A. atroviolaceum* with an IC_{50} of 79.0 ± 2.75 μ g/ml. In the β -carotene/linoleic acid assay, the inhibition ratios of the oxidation of linoleic acid by *A. atroviolaceum* and *A. dictyoprosum* were too close to each other ($71.2 \pm 2.20\%$ and $72.3 \pm 1.20\%$, respectively), while that of the synthetic antioxidant, BHT, was 96%.