

Abstract

Antioxidant Effects of Different Extracts from Root and Aerial Parts of *Scorzonera hieraciifolia* [†]

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Abstract: The genus *Scorzonera* has great potential as traditional drugs and foods in several traditional systems including Turkey. In this current work, we investigated antioxidant properties of different extracts from *S. hieraciifolia* aerial parts and roots. We used different extracts (dichloromethane, ethyl acetate, hexan, methanol and water). To obtain full picture for antioxidant properties, different methods including radical scavenging (DPPH and ABTS), reducing power (CUPRAC and FRAP), metal chelating and phosphomolybdenum assay. Total phenolic and flavonoid contents were also calculated for each extract. Antioxidant abilities and total bioactive components depended on the solvents used. The highest level of phenolic was determined in methanol extracts, followed by water, ethyl acetate, hexan and ethyl acetate. Similar to phenolic contents, the best antioxidant properties were obtained by methanol and water extracts. Based on our findings. *S. hieraciifolia* extracts could be valuable source to combat oxidative stress related diseases such as cancer.

Keywords: *Scorzonera*; solvent; reducing power; Turkey



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