



## Determination of Antioxidant and Phenolic Content of Edible Plants

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### Article History

Received: 18.01.2019

Accepted: 06.04.2019

### Keywords

Antioxidant activity

Phenolic compound

### Abstract

Today, there is a growing interest in nutritional awareness and a selective preference towards a healthy and balanced diet. A number of varieties of vegetables are good sources of essential components in human nutrition, providing vitamins, minerals, and fibre in general. Furthermore, chemical substances specific for given vegetables are responsible for various effects in the living organisms. For instance, natural antioxidants are the commonly known components of vegetables, neutralizing free radicals in the human body. The aim of the research was to evaluate antioxidant activity and phenolic content in leaves of three common *Urtica dioica* L., *Rumex acetosella* L., and *Chenopodium album* L. The antioxidant activity of these plants varied from 117.99 to 1273.83  $\mu$ MTE/g. *Urtica dioica* L. had the highest antioxidant activity (1273.83  $\mu$ MTE/g) followed by *Rumex scutatus* L.(225.09  $\mu$ MTE/g) while the lowest value was observed in *Chenopodium album* L.(117.99  $\mu$ MTE/g). The highest phenolic compound was determined in *Urtica dioica* L.(0.811 mMGAE/g), and the lowest phenolic compound was found in *Rumex scutatus* L. (0.481 mMGAE/g). The results obtained in this study indicate that wild *Urtica dioica* L., *Rumex acetosella* L., and *Chenopodium album* L. could be an important dietary source because of its good antioxidant and phenolic content properties.

### Article Type

Research Article

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**Suggested Citation:** Demir, H. & Biçim, G. (2019). Determination of Antioxidant and Phenolic Content of Edible Plants, *Journal of Tourism and Gastronomy Studies*, 7 (2), 1035-1041.

DOI: