Total phenolics and mineral contents of *Glycyrrhiza glabra* roots grown wild in Turkey

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**Abstract**
Liquorice or licorice is a root of *Glycyrrhiza glabra* L. from which a somewhat sweet flavour can be extracted. The liquorice plant is a legume (related to beans and peas) that is native to southern Europe and parts of Asia. It is a herbaceous perennial, growing to 1 m in height, with pinnate leaves about 7–15 centimetres long, with 9–17 leaflets. The flowers are 0.8–1.2 cm long, purple to pale whitish blue, produced in a loose inflorescence. The roots are stoloniferous. The flavor of liquorice comes mainly from a sweet-tasting compound anethole ["trans"-1-methoxy-4-(prop-1-enyl)benzene], an aromatic, unsaturated ether compound also found in anise, fennel, and several other herbs. Much of the sweetness in liquorice comes from glycyrrhizin, a compound sweeter than sugar. In this study, the total phenolic content and macro and micro elements (N, P, K, Ca, Mg, Na, Fe, Mn, Zn and Cu) of roots of wild grown *Glycyrrhiza glabra* are reported. The amount of total phenolics was 12.88 μg GAF/mg DW. The average N, P, K, Ca, Mg, Fe, Mn, Zn, Na and Cu composition in licorice roots was 2.80%, 175 mg/100 g, 1400 mg/100 g, 147 mg/100 g, 20 mg/100 g, 6 mg/100 g, 4.4 mg/100 g, 2.1 mg/100 g and 0.1 mg/100 g, respectively.

Key words: diversity, licorice, phenolic content, minerals