

Antioxidant activity of leaves and inflorescence of *Eryngium Caucasianum* Trautv at flowering stage

Ebrahimzadeh Mohamamd Ali, Nabavi Seyed Fazel, Nabavi Seyed Mohammad
Pharmaceutical Sciences Research Center, School of Pharmacy, Mazandaran University of
Medical Sciences, 48189, Sari, Iran.

ABSTRACT

Methanol extracts of leaves and inflorescence of *Eryngium Caucasianum* Trautv at flowering stage were investigated for their antioxidant activities employing six in vitro assay systems, i.e. DPPH and nitric oxide radical scavenging, reducing power, linoleic acid and iron ion chelating power. IC₅₀ for DPPH radical-scavenging activity was 0.15 +/- 0.01 for leaves and 0.39 +/- 0.02 mg ml⁻¹ for inflorescence. Reducing powers of both extracts increased with the increase of their concentrations. Leaves extract showed better activity than Vitamin C (p< 0.05). Extracts showed weak nitric oxide-scavenging activity. Leaves extract exhibited better Fe²⁺ chelating ability (IC = 0.25 mg ml⁻¹) that was comparable with EDTA. (IC = 18 mug ml⁻¹). Inflorescence extracts had shown a very weak activity. Extracts showed very good scavenging activity of H₂O₂. IC₅₀ was 25.5 +/- 1.3 for leaves and 177.2 +/- 11.6 mg ml⁻¹ for inflorescence, respectively. No antioxidant activity exhibited in linoleic acid test. Extracts exhibited different levels of antioxidant activity in all the models studied.

KEYWORDS

Antioxidant activity . DPPH . *Eryngium caucasicum* . Free radical scavenging activity . Folin-Ciocalteu

REFERENCES