

# Chemical composition and antioxidant activity of phenolic compounds and essential oils from *Calamintha nepeta* L.

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## Description

Background

Essential oils, infusion and decoction extracts of *Calamintha nepeta* L. were evaluated for their bioactive substances (polyphenols and essential oils) and antioxidant activities.

## Methods

The amounts of phenolic compounds were determined by colorimetric assays and identified by high performance and liquid chromatography coupled with ultraviolet detector (HPLC-UV) method. The chemical composition of essential oils was determined by gas-chromatography coupled with mass spectrometry (GC/MS) method. For the evaluation of the antioxidant activity of essential oils and extracts, two different assays (reducing power and DPPH radical scavenging activity) were used.

## Results

Infusion extract presented the highest phenolic content, followed by the decoction one, while the lowest amount was observed in essential oils. The amount of flavonoids of the decocted extract was higher than that of the infused ...