

Antimicrobial Activity and Chemical Composition of the Essential Oil of *Nepeta crispa* Willd. from Iran

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The composition and antimicrobial activity of the essential oil of *Nepeta crispa* Willd., an endemic species from Iran, was studied. The oil was obtained from the aerial parts of the plant and analyzed by GC and GC/MS. Twenty-three compounds, accounting for 99.8% of the total oil, were identified. The main constituents were 1,8-cineol (47.9%) and 4 α ,7 α ,7 β -nepetalactone (20.3%). The antimicrobial activity of essential oil of *N. crispa* was tested against seven gram-negative or gram-positive bacteria and four fungi. The results of the bioassays showed the interesting antimicrobial activity, in which the gram-positive bacteria, *Bacillus subtilis* and *Staphylococcus aureus*, were the most sensitive to the oil. Also, the oil exhibited a remarkable antifungal activity against all the tested fungi.

Key words: *Nepeta*, Essential Oil, Antimicrobial Activity