

Biological Activity of Essential Oils from *Salvia nemorosa* L.

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Abstract : In this study, antimicrobial activity of essential oil and ethyl acetate and ether extracts of *S. nemorosa* were examined against some species of bacteria and fungi. The essential oil of the aerial part of *S. nemorosa* was examined by GC and GC-MS. In the essential oil of *S. nemorosa* 26 Compounds have been identified. 2-Nonanone (44.09 %), 2-Undecanone (33.79 %), E-Caryophyllene (3.74 %) and 2-Decanone (2.89 %) were the main components of the essential oil. The essential oil analysis showed greatest antimicrobial activity against *Staphylococcus epidermidis* (5.3 µg/ml) and *S. cerevisiae* (9.3 µg/ml). The ethyl acetate showed greatest antimicrobial activity against *Bacillus subtilis* (106.7 µg/ml), *Candida albicans* (5.3 µg/ml) and ether extract showed greatest antimicrobial activity against *Klebsiella pneumoniae* (10.7 µg/ml) and *Saccharomyces cerevisiae* (10.7 µg/ml). In conclusion, we suggest that the antimicrobial activity of *S. nemorosa* may be due to its content of germacrene and linalool.

Keywords : antibacterial activity, antifungal activity, *Salvia nemorosa* L., essential oils, biological activity

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