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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 μ g/ml) and S. cerevisiae (9.3 μ g/ml). The ethyl acetate showed greatest antimicrobial activity against Bacillus subtilis (106.7 μ g/ml), Candida albicans (5.3 μ g/ml) and ether extract showed greatest antimicrobial activity against Klebseilla pneumoniae (10.7 μ g/ml) and Saccharomyces cerevisiae (10.7 μ g/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 **Conference Title:** ICMBPS 2015: International Conference on Medical, Biological and Pharmaceutical Sciences

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