

Antioxidant Property of Volatile Oils Determined by the Ferric Reducing Ability

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Some current oils and their main components were studied to determine their antioxidant values. This was done by using the modified method of ferric reducing ability of plasma. It has been established that volatile oils of medicinal plants have on average a reducing capacity of 3.5–220 mmol/kg oil. The reducing capacities of the main constituents of volatile oils are 0.165–65.5 mmol/kg in concentrated oils. The highest reducing capacity was showed for phellandrene (65.438 ± 0.166 mmol/kg) and anethole (50.087 ± 0.160 mmol/kg) while the lowest values were obtained for menthol (0.165 ± 0.023 mmol/kg) and menthone (0.168 ± 0.010 mmol/kg). It has been stated that the antioxidant values of the main constituents are lower than those of volatile oils. The reducing capacity of the main constituents of medicinal plant drugs at different concentrations was also determined.

Key words: Medicinal Plants, Volatile Oil, Antioxidant Activity