

New approach of standardization of herb Oregano

© Ramil Sh. Khaziev,^{1+*} Dilyara N. Petrova,¹ and Aleksander Yu. Sitenkov²

¹Division of Pharmacology Pharmaceutical Department With the Courses of Pharmacognosy and Botany.

²Department of Pharmaceutical Chemistry Courses of Analytical and Toxicological Chemistry.

Kazan State Medical University. Amirkhana, St., 16. Kazan, 420016. Republic of Tatarstan.

Russia. Phone: +7 (843) 521-27-88. E-mail: xaziev@inbox.ru

*Supervising author; ⁺Corresponding author

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Abstract

Oregano (*Origanum vulgare* L., *Lamiaceae*) is one of the most popular herbs of modern medicine, used as anti-inflammatory and expectorant for upper respiratory tract infections, is included in the Russian and the European Pharmacopoeia. Both Pharmacopoeia assess the quality of essential oil content. In connection in Russia grows massively one of 4 chemotypes *O.vulgare*, characterized by low content of essential oil in it and the lack of thymol and carvacrol, it is offered to standardize this raw material by other groups of natural compounds - flavonoids.

We developed a rapid procedure quantitative determination of total flavonoids in the herb Oregano on the basis of differential spectrophotometry, of the reaction products of this compounds with aluminum chloride. It is offered to refuse long extraction of flavonoids from raw material, with the help of an introduction to the design formulas correction factor that takes into account the incomplete extraction of determined compounds.

HPLC shows that the dominant grass flavonoid is cynaroside Oregano (luteolin-7-glucoside), the molecular weights of it with aluminum chloride in 400 nm, which is recommended to use in calculation. All time of analysis does not exceed more than one hour, determination error does not exceed 2.48%.