

## Parameters of the quantitative determination when standardizing *Salvia grandiflora* leaves

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**Introduction:** By the results of the earlier chemotaxonomic study of sage of the flora in Ukraine it has been found that *S. grandiflora* is one of the most promising species. Since the State Pharmacopoeia of Ukraine (SPhU) and the European Pharmacopoeia does not have monographs concerning *S. grandiflora* leaves, it is advisable to develop the parameters of its standardization according to the requirements of the SPhU.

**Materials and methods:** The study object was *Salvia grandiflora* leaves. It has been proposed to determine the qualitative composition and the quantitative content of terpenoids by gas chromatography, while phenolic compounds – by high-performance liquid chromatography (HPLC).

**Results:** The dominant compounds of terpenoid nature in *S. grandiflora* leaves are 1,8-cineol,  $\alpha$ - and  $\beta$ -pinenes, p-cimene, limonene, camphene, camphor, borneol, pinocarvone,  $\alpha$ -copaene and  $\alpha$ -amorphene. Therefore, we propose to use the content of these terpenoids as one of the standardization parameters for *S. grandiflora* leaves. The content of 1,8-cineol should be not less than 50 mg/100 g of the raw material,  $\alpha$ -pinene – not less than 300 mg/100 g,  $\beta$ -pinene – not less than 170 mg/100 g, camphor – not less than 140 mg/100 g, and borneol – not less than 80 mg/100 g.

The dominant compound of phenolic nature in *S. grandiflora* leaves is rosmarinic acid, therefore, its content in leaves is also proposed to be used as a parameter for standardization of the raw material. The content of rosmarinic acid should be at least 400 mg/100g of the raw material.

**Conclusions.** Five batches of the raw material have been analyzed. All of them corresponded to the standardization parameters proposed. The standardization parameters developed for *S. grandiflora* leaves will serve as a basis for elaborating the normative documentation for this raw material according to the SPhU.