

# STUDY PHENOLIC COMPOUNDS OF DIFFERENT VARIETIES OF *FRAGARIA MOSCHATA* L. LEAVES

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**Introduction.** Biologically active substances (BAS), which are contained in plant raw materials, have various types of pharmacological activity. In the modern approach to the search for sources of BAR in order to create phytopreparations, the availability of raw materials is an important factor, which will allow to reduce the costs of manufacturing phytopreparations. Therefore, attention should be paid to plants that are successfully cultivated and have a sufficient raw material base. Strawberry is a unique plant that is loved in all countries of the world, it has always attracted people with its bright appearance, unforgettable and sweet taste. Muscat strawberry leaves are an available type of raw material, so we consider it appropriate to conduct a comparative pharmacognostic study of *Fragaria moschata* L. leaves of different varieties.

**Materials and methods.** The objects of the study were the leaves of two varieties of *Fragaria moschata* – «Alba» and «Victoria Grand». To identify the phenolic compounds the qualitative chemical reactions and paper (PC) and chromatography in a thin layer sorbent (TLC) were used [2, 3]. We are studied the extract (used ethanol), obtained in the raw material-extractant ratio of 1:10. The research was carried out in the solvent system I direction - ethyl acetate-formic acid-water (10:2:3) and II direction - 2% acetic acid (paper chromatography). The TLC was performed in the butanol-acetic acid-water solvent system (4:2:3). The results were compared with standard samples. The quantitative content of flavonoids and hydroxycinnamic acids was determined by the spectrophotometric method [1].

**Results and discussion.** During the study of flavonoids using the cyanidin reaction, flavonoid-aglycones were found in the «Alba» variety, and mainly flavonoid glycosides in «Victoria Grand». During the chromatographic study with standards samples of rutin, quercetin, chlorogenic acid and esculetin were identified in the leaves of the «Alba» variety; variety «Victoria Grand» - quercetin, hyperoside, chlorogenic acid and scopoletin.

It was established that the leaves of *Fragaria moschata* variety «Alba» contain  $0.1400 \pm 0.050$  flavonoids, variety «Victoria Grand» -  $0.2345 \pm 0.0410$ . The quantitative content (in %) of hydroxycinnamic acids for «Alba» was  $0.1456 \pm 0.0045$ ; variety «Victoria Grand» -  $0.1965 \pm 0.0025$ .

## References:

1. European Pharmacopoeia. – 4<sup>th</sup> ed.– Strasbourg: Council of Europe, 2002. 2416.
2. Hostettmann, K. Preparative chromatography techniques. Applications in natural product isolation. Berlin: Springer–Verlag, 1998. 350.
3. Wagner, H. Plant drug analysis. A thin layer chromatography atlas. Berlin, Heidelberg, N.Y.: Springer–Verlag, 2001. 389.