



# **INTERNATIONAL E-CONFERENCE CONTEMPORARY PHARMACY: ISSUES, CHALLENGES AND EXPECTATIONS**

**23rd OF OCTOBER 2020, KAUNAS**

## **ABSTRACT BOOK**

**2020 autumn**

**October 23<sup>rd</sup>, 2020**

**Kaunas, Lithuania**

**The international conference “CONTEMPORARY PHARMACY: ISSUES, CHALLENGES AND EXPECTATION. 2020 AUTUMN” is organized by Lithuanian University of Health Sciences, Faculty of Pharmacy, Department of Drug Technology and Social Pharmacy.**

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ISBN 978-9955-15-669-7

**2020, Kaunas**

Language of abstracts was not corrected.

## Study of quantitative and qualitative composition of Highbush blueberry (*Vaccinium corymbosum*) leaves extract

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**Introduction:** Raw materials of plants, which belong to the genus *Vaccinium* of the Heather family (*Ericaceae*), are widely used as a hypoglycemic, hypolipidemic, and antioxidant agent in Ukrainian traditional and scientific medicine [1]. We expect that the medicinal raw materials of this genus species could have the similar pharmacological effects. Herbal raw materials of blueberries *V. uliginosum* L., a wild plant species, and *V. corymbosum* L., which is most widely cultivated, are very promising in terms of the development of new herbal medicines. *V. uliginosum* fructus and *V. corymbosum* fructus are widely used in medicine, pharmacy and the food industry. Therefore, it is grown in Ukraine, but tons of leaves become waste, while they also contain a significant amount of biologically active substances. It is known that leaves contain essential oil (36 compounds), chlorogenic acid and hyperoside. Thus, study of the chemical composition of blueberry leaves extracts have good prospects for creating new phytochemicals [2].

**Materials and methods:** The object of the study was the extract obtained with 50 % ethanol from the leaves of *V. corymbosum* L., which were harvested in September 2018 on private plantings of highbush blueberry in Sadko Garden Center of Kyiv region (GPS 50.459228, 30.800649). The method of HPLC was applied to provide the qualitative and quantitative analysis of compounds in the dry extract of highbush blueberry leaves before and after hydrolysis.

**Results:** Several compounds of phenolic nature such as chlorogenic and caffeic acids, rutin, quercetin-3-O-glycoside, campherol-3-O-glycoside, quercetin, campherol were identified as a result of the study of the phenolic composition of dry extract from the leaves of highbush blueberry by HPLC method.

**Conclusions:** The carried out studies of chemical composition of the highbush blueberry leaves extract confirm the prospects for the creation new drugs and will be used for its standardization.

### References

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