

DEVELOPMENT OF THE METHODS TO CONTROL THE QUALITY OF BIOLOGICALLY ACTIVE COMPOUNDS IN PHYTOEXTRACTS

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Introduction. At the Department of Pharmaceutical Technology of Drugs of The National University of Pharmacy performed work on the development of technology syrup "Cholophyt" with hepatoprotective and choleric action, which includes herbs such as artichoke leaves, rose hips, stevia herb, immortelle flowers, and corn silk.

Aim. The aim of our research - development of quality control methods of biologically active compounds in phytoextract, which is part of the syrup. To identify of biologically active substances (BAS) in investigated syrup used physico-chemical and chemical methods.

Materials and methods. Artichoke leaves, rose hips, stevia herb, immortelle flowers, corn silk and reagents that meet SPbU. Chemical crockery class A, weighing «AXIS» ANG 200. The method of TLC plates for TLC Silica gel 60 F25425. The method of absorption spectrophotometry in the ultraviolet and visible spectrophotometer using Evolution 60S. Chemical reactions inherent flavonoids.

Results and discussion. The previous biologically active substances of phytoextract total set by absorption spectrophotometry in the ultraviolet region. Established that all absorption spectra of test solutions are characterized by absorption bands in the region of 290-327 nm, which proves the existence of substances aromatic character.

Have identified BAS of phytoextract by thin layer chromatography in a solvent system as anhydrous formic acid – glacial acetic acid – water – ethyl acetate (11: 11: 27: 100) compared with pharmacopeia standard model, chlorogenic acid and caffeic acid. The data indicate the presence of a total amount phytocomplex hydroxycinnamic acid preferably similar in structure to chlorogenic acid.

Quantitative determination of the amount BAS was performed by absorption spectrophotometry in the UV at 327 nm wavelength. Calculation of the content of hydroxycinnamic acids was performed by standard method.

Conclusions. Established that amount of hydroxycinnamic acids content in terms of chlorogenic acid is 0.10 - 0.15%.