

RESEARCH OF THE DRY ALCOHOLIC EXTRACT FROM BEARBERRY LEAVES

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Introduction. Bearberry is one of the plants, which is actively used not only in traditional, but also in officinal medicine. It is a small evergreen shrub. In the medical purposes are used the collected during blossoming leaves bearberry. The medicinal based on bearberry, have antibacterial, antiseptic, anti-inflammatory, disinfectant, diuretic and astringent properties. Using decoctions prepared from this plant eliminates inflammatory processes of the bladder, urinary tract and kidneys. The leaves of bearberry are included to the diuretic compositions № 1 and № 2, "Detoxifit", "Nefrofit". But the decoction as a medical form has disadvantages such as: short expiration date, irregularity of the water extracts because of the numerous factors with influence on their quality of preparation; duration of the preparation. Therefore the creation of the national galenics and newgalenics medicines on the basement of biologically active substances of bearberry leaves is an important task of modern pharmacy.

Aim. Make a phytochemical research of the dry extract from bearberry leaves, received with using of 96 % ethanol.

Materials and methods. The research object is the dry extract of bearberry leaves received with 96 % ethanol. The identification of substances was carried out by the thin-layer chromatography with using pharmacopoeia methods. Pharmacopoeia spectrophotometry methods were used for determination of the assay of arbutin, hydroxycinnamic acids, flavonoids and sum of phenolic compounds.

Results and discussion. Arbutin, hydroxycinnamic acids, flavonoids and tannis were defined in the extract. The content of these groups of substances in the dry extract in comparison with the decoction is given in the table below.

Table

The results of assay of biologically active substances in the extracts

Group BAR	Assay, %	
	The decoction	The dry extract
Derivatives of hydroquinone	8,59 ± 0,05	5,78
Hydroxycinnamic acids	1,58 ± 0,01	1,65
Flavonoids	1,59 ± 0,04	1,43
Phenolic compound	8,80 ± 0,05	13,33

These results will be used in the standardization of the dry extract from the bearberry leaves.

Conclusions. The further chemical and pharmacological researches of the dry alcoholic extract of bearberry leaves will be a basement for the creation of a new medicine from this raw material.