МІНІСТЕРСТВО ОХОРОНИ ЗДОРОВ'Я УКРАЇНИ
НАЦІОНАЛЬНИЙ ФАРМАЦЕВТИЧНИЙ УНІВЕРСИТЕТ
КАФЕДРА ПРОМИСЛОВОЇ ТЕХНОЛОГІЇ ЛІКІВ ТА КОСМЕТИЧНИХ ЗАСОБІВ
ГО «НАЦІОНАЛЬНА АКАДЕМІЯ НАУК ВИЩОЇ ОСВІТИ УКРАЇНИ»

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NATIONAL UNIVERSITY OF PHARMACY
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NATIONAL ACADEMY OF HIGHER EDUCATION SCIENCES OF UKRAINE

XI МІЖНАРОДНА НАУКОВО-ПРАКТИЧНА КОНФЕРЕНЦІЯ

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PREPARATION AND ANALYSIS OF DRY EXTRACT FROM *ALHAGI PSEUDALHAGI*

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Introduction. Selection of extractants, determination of the sum of the dry extract, and the amount of rutin contained in the dry extract of the raw material of the *Alhagi L.* plant, which grows widely in the regions of Uzbekistan. Organic solvent mixtures (systems) were selected and the Rf value was determined, while the amount of rutin was determined. In recent years, the requirements for determining the quality of medicines have increased, requiring the use of modern analytical methods. In the creation of drugs, the demand for drugs obtained from plant organs is increasing, while synthetic drugs have been abandoned. It is required to create diuretic, bile, laxative, and diabetes medicines on a global scale, and to determine their quality by analyzing them using modern methods.

The aim of the research. the bilberry plant growing in the Republic of Uzbekistan is not fully studied. Based on the above, it is necessary to take a dry extract from the above-ground part of the *Alhagi L.* plant to determine the percentage of the total amount, to determine the authenticity of the rutin contained in the extract by the TLC method, to determine the Rf value of the substance, to select the opening reagent, to determine the rutin contained in the extract. it is planned to determine the amount.

Research methods. In order to obtain a dry extract from the raw material of the yarrow plant, a 10g sample of the crushed raw material was taken, placed in a 250 ml flask, purified water was added until the raw material was buried, and then placed in a boiling water bath (900 -1000) was heated for 2 hours and filtered through cotton while hot. The residue was extracted a second time, and the process was repeated 1 more time. The filtrates were combined and transferred to a 250 ml porcelain beaker and evaporated in a boiling water bath until a dry residue was left, and the residue was scraped off and the percentage was determined.

Main results. The results of obtaining the dry extract are shown in Table 1

Table 1

Amount of dry extract obtained %

Draw received (gr)	**Determined**		**Statistical report**
	gr	**%**	$\bar{X}$ = 23,41
10,0	2,32	23,20	S= 1,189
10,0	2,30	23,00	S=1,09
10,0	2,50	25,00	$\Delta\bar{X}$=3,03, $\Delta\bar{X}$= 1,5
10,0	2,25	22,50	E= 12,94, $\bar{E}$=6,45

In order to determine the presence of rutin in the dry extract, a chromatographic plate made of aluminum oxide is dripped onto the start line in a volume of 0.001 ml with a diameter of 3-5 mm, leaving a distance of 2 cm from the side, and a standard solution of rutin is dropped and dried at room temperature, then chromatographic analysis was performed. [Table 2]

Results of chromatographic analysis of rutin dry extract

Table 2

15% acetic acid	Butanol acetic acid water (4:1,5)	Benzene, ethanol, vinegar (5:5)	Chloroform ethanol(9:2)	Acetic acid - alcohol (5:1)	Petroleum ether alcohol (8:2)	Alcohol - acetic acid (9:1)
0,51*	0,44	0,62*	-	0,55	-	-

A mixture of organic solvents (system) was selected for routine chromatographic analysis. As a result, it was observed that when 15% acetic acid was taken as a system, a clear stain was obtained Rf – 0,56, and when 30% acetic acid was taken, Rf was equal to -0,6.

Conclusion. After extraction with water, the total dry extract was 23.2%. When determining the authenticity of rutin by the TLC method, it is observed that a clear stain is formed when 15% acetic acid is taken as a system.

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