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of Academician Sabir Yunusovich Yunusov**

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TASHKENT



**ACADEMICIAN
SABIR YUNUSOVICH YUNUSOV
(1909-1995)**

RESEARCH IN THE DEVELOPMENT OF THE DRY EXTRACT OF *HELICHRYSUM MARACANDICUM (Popov ex Kirp.)*

Sadikova R.K., Karieva Y.S.

Tashkent Pharmaceutical Institute, Tashkent, Uzbekistan

e-mail: rano.sadikova.89@mail.ru, tel.: (97)442-93-99

Samarkand immortelle is a perennial herbaceous plant widely distributed on the territory of the Republic of Uzbekistan. Decree of the President of the RUz PD-4670 dated April 10, 2020 "On measures for the protection, cultural cultivation, processing of wild medicinal plants and the rational use of available resources" provides for the cultivation and processing of this plant.

Taking into account the above, scientists of the Tashkent Pharmaceutical Institute obtained a dry extract of Samarkand immortelle by the method of circulation extraction followed by drying. The quality of the extract was assessed according to the following indicators: appearance (organoleptically), authenticity (qualitative reactions to flavonoids), weight loss on drying and heavy metals (methods I, GPA.1.2.1.0010.15), quantitative content of isosalipurposide (SP method). According to the results obtained, the analyzed dry extract in appearance is a light brown powder with a characteristic grassy odor. Conducted qualitative reactions to flavonoids with magnesium powder and concentrated hydrochloric acid (red color appeared) indicate the presence of this group of biologically active substances. The weight loss on drying was 4.27%, and in the determination of heavy metals, the color of the test solution did not exceed the color of the reference solution. The content of the sum of flavonoids in terms of isosalipurposide was equal to 31.38%: the norm of the content of biologically active substances was set at least 25%.

According to the European Pharmacopoeia (Ph.Eur.7.0), according to the degree of hygroscopicity, the analyzed extract belongs to the group of "hygroscopic substances". Also, according to the method modified by the authors of S.A. Nosovitskaya, it was found that the moisture absorption properties of the extract are linearly dependent on the humidity of the environment and the surface area of the sample.

In order to substantiate the value of the obtained extract, research was carried out to study the amino acid and elemental composition. The results showed the presence of 38 micro and macro elements in the dry extract. Amino acid analysis showed the presence of 20 amino acids in the dry extract, 10 of which are essential. The total amino acid content is 6753.134 µg/g, of which 29.19% are essential amino acids.

Experiments to ascertain the shelf life of a dry extract of Samarkand immortelle confirmed the constancy of qualitative and quantitative indicators for 2 years.