



DETERMINATION OF THE QUALITY INDICATORS OF THE CAPSULE BASED ON DRY EXTRACT OF INDIAN GINSENG

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of this study was to study the qualitative and quantitative characteristics of the type of capsule preparation based on dry extract of Indian ginseng.

ABSTRACT

Medicinal plants, known to mankind since very ancient times, have not lost their significance even after 1000 years of their work, which they wrote to us from past centuries as a result of their activities in medicine-Ibn Sina's pharmacy. His works were of great importance in the development of world medicine, in the study of every drop in the world of plants and in the reception of new modern medicines. Medicinal plants, which were used by Ibn-Sina, turned out to have their own unique pharmacological properties as a result of research work carried out later, that is, after the development of chemistry and medical science [1,2].

Great importance was attached to preparations from the ginseng root in India and China. At the same time, the types of medicines made from raw materials of the ginseng plant, which has its long ancient history and is considered very susceptible to many diseases, are of course from the same supply. Currently, stress fatigue in humans due to severe processes occurring on earth, is observed in many cases such as malaise. For this reason, preparations based on both types of ginseng, which have a refreshing adaptogenic effect and chemically rich properties, are of particular importance. Professors and young researchers of the Tashkent Pharmaceutical Institute conduct scientific research on the basis of dry ginseng extract in order to create a type of capsule preparation. Thanks to this, a capsule dosage form was created based on a dry extract of Indian ginseng [1,3,4].

Relevance. Medicinal plants, known to mankind since very ancient times, have not lost their significance even after 1000 years of their work, which they wrote to us from past centuries as a result of their activities in medicine-Ibn Sina's pharmacy. His works were of

great importance in the development of world medicine, in the study of every drop in the world of plants and in the reception of new modern medicines. Medicinal plants, which were used by Ibn-Sina, turned out to have their own unique pharmacological properties as a result of research work carried out later, that is, after the development of chemistry and medical science [1,2].

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The purpose of this study was to study the qualitative and quantitative characteristics of the type of capsule preparation based on dry extract of Indian ginseng.

Methods and techniques. In our research, ready-made capsules based on dry extract of Indian ginseng were used as raw materials. The capsules we offer have been evaluated under the general article "capsule", which is listed in SP XI Edition 2-tom (143-145 chapters). The aim of the work was to determine the following quality indicators: appearance; hardness, the average weight of the capsule, \pm g and its deviation from it; the average weight of the incubated mass and its deviation from it; residual moisture; parameters such as decomposition and microbiological purity were studied.

The results show that the capsules we offer are white capsules with a size of 00 mm of dark green color with an incubated mass of dark brown color, with a specific smell.

Table.

The indicator under study	ND requirements	Results of the analysis
Appearance	White 00 numbered capsules with a coat of dark green color, incubated mass of dark brown color, with a specific smell	suitable
Authenticity	The capsule mass was dissolved in 5 ml of methanol, 1.0 ml of Dragendorf reagent was added to it, and after 5 minutes the flame became a residual color dressing.	suitable
Average capsule weight, G \pm and its withdrawal, %	0.405-0.495 (\pm 10.0%)	0.462g \pm 0.23%

The average mass of the incubated mass, G ± and its exclusion from it, %	0.540-0.660 (±10.0%)	0.614g ±0.19%
Solubility	It is necessary to decompose within 20 minutes	11 min
Breakup	After 45 minutes, it should be at least 75%	90.8%
Residual moisture	Must not exceed 5%	3.8%
Microbiological purity	SP XI and amendments № 2 The total number of aerobic bacteria in 1 g of the drug should not exceed 10 ⁴ . The total number of fungi should not exceed 10 ² . In the absence of <i>Pseudomonas aeruginosa</i> , <i>Escherichia coli</i> , <i>Staphylococcus aureus</i> , <i>salmonella</i> bacteria, the composition should not exceed 10 ² for enterobacteria and some gram-negative bacteria.	Category 3B suitable

Results of determining the quality indicators of capsules containing Indian ginseng dry extract

The deviation from the average weight in one capsule should not exceed ±10%. The results obtained are presented in the table. For us, this indicator was 0.462 g ±0.23%, the average weight of the encapsulated mass, and the deviation from it was 0.614 g ±0.19%, that is, SP XI did not exceed the specified norm. Fragmentation in the capsules did not increase by 90.8%, that is, it did not decrease by 75% for 45 minutes. Based on the results presented in the table, it fully meets the requirements of regulatory documents for quality indicators (melting, hardness, residual moisture, microbiological purity) of the capsule in which the Indian extract is stored.

Conclusions. Thus, the quality parameters of the capsule were determined (appearance; hardness, average weight of the capsule, Gel and its extraction from it; average mass of the incubated mass and its extraction from it; residual moisture; decomposition and microbiological purity). It has been proven that they meet the requirements of the SP XI edition.

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