



LOCAL UNDER THE CIRCUMSTANCES CULTIVATED SPANISH LAVENDER (*LAVANDULA STOIC L.*) OF PHARMACOGNOSTIC FEATURES AND STANDARDIZATION CRITERIA

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Relevance: Last in years Uzbekistan In the Republic medicinal plants cultivation, reproduction work and them pharmaceutical to practice current to grow issues state on a scale current direction as confession Our Republic Presidential Decree No. PQ-4901 of November 26, 2020 "On measures to expand the scope of scientific research on the cultivation and processing of medicinal plants, and the development of their seed production" in the decision new, promising medicinal plants scientific basically study, their raw material standardization and pharmacopoeia requirements suitable quality standards working exit task This is fixed. plant our country in the flora natural accordingly wide not distributed and pharmacognostic features enough unexplored because of it scientific in terms of research to do, morphological, anatomical and physicochemical indicators determination and medicinal raw material as standardization criteria working exit pharmaceutical working release, local medicinal drugs assortment in expansion current importance profession will reach.

The research purpose: Spanish lavender (*Lavandula*) grown in the local agroclimatic conditions of Uzbekistan *stoechas L.*) raw material. The research aims to determine the morphological and anatomical structure of the plant, microscopic diagnostic signs, evaluate the main physicochemical parameters (residual moisture, total ash content, insoluble ash content, heavy metal content, etc.) based on pharmacopoeial requirements, and develop criteria for standardization as a medicinal raw material.

Methods and styles: The above-ground parts (flowers, stems, and leaves) of Spanish lavender (*Lavandula stoechas L.*) grown in the local agroclimatic conditions of Uzbekistan were selected as the object of the study. Pharmacognostic analyses were conducted in laboratory conditions based on the standards of the State Pharmacopoeia of the Republic of Uzbekistan and the European Pharmacopoeia. The external morphological and anatomical characteristics of the plant were studied. Pharmacopoeial methods were used to determine the main quality criteria from physicochemical indicators, such as residual moisture, total ash content, ash insoluble in 10% hydrochloric acid, and heavy metal impurities. The results were statistically processed, diagnostic signs were identified, and recommendations for standardization of medicinal raw materials were developed.

Results: The external morphological characteristics of Spanish lavender (*Lavandula stoechas L.*) specimens grown in local agroclimatic conditions were clearly described: the stem of the plant is four-sided, the leaves are opposite, thinly lanceolate, the surface is covered with soft hairs; the flowers are purple, have a characteristic odor, and are rich in essential oil. According to the physicochemical parameters, the residual moisture, total ash content, and ash insoluble in 10% hydrochloric acid of the plant raw material were found to comply with the standards of the State Pharmacopoeia of Uzbekistan. Based on the data obtained, the main diagnostic signs (morphological, microscopic, and physicochemical parameters) were proposed for the standardization of Spanish lavender raw material. The results of the study indicated the possibility of using this plant as a



medicinal raw material in local pharmaceutical production and provided a scientific basis for the development of a draft of provisional quality standards for the national pharmacopoeia.

Conclusion: Spanish lavender (*Lavandula*) grown in the local agroclimatic conditions of Uzbekistan stoechas *L.*) was studied in detail for the first time from a pharmacognostic perspective. The morphological and anatomical structure of the plant, microscopic diagnostic signs, and physicochemical parameters (residual moisture, total ash, ash insoluble in 10% hydrochloric acid) were determined and their compliance with the requirements of the national pharmacopoeia was proven.