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MICROBIOLOGICAL PURITY OF FENUGREEK CULTIVATED IN THE CONDITIONS OF THE TURKESTAN REGION AS AN INDICATOR OF THE SAFETY OF USE

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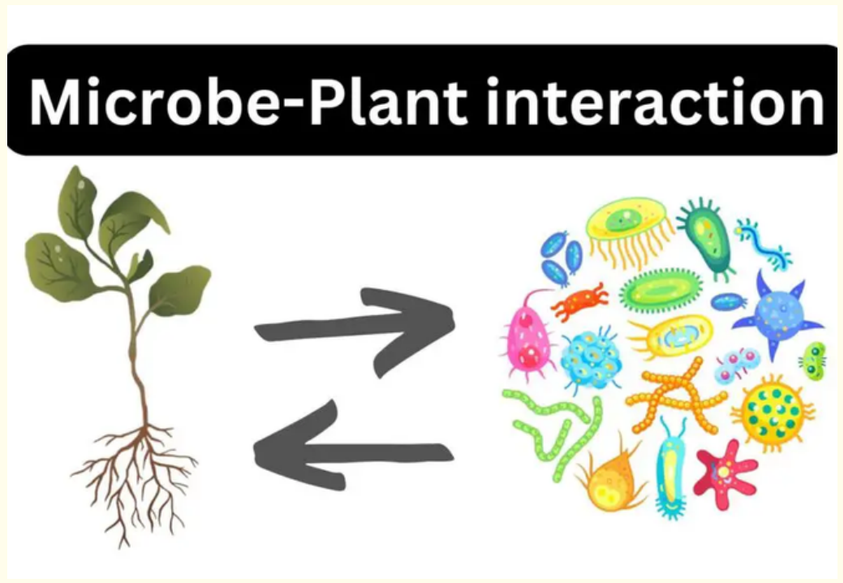
Currently, there is a noticeable deterioration in the environmental situation of the environment, which entails a change in the environmental situation in many areas of procurement of medicinal plant raw materials. Most of the exploited medicinal plant thickets are located in areas of active human economic activity, in transport-accessible territories (adjacent to settlements, roads, industrial complexes, agricultural fields). The ecosystems of these territories have a high level of pollutants. Intensive anthropogenic impacts on the environment inevitably manifest themselves in the contamination of medicinal plants. This makes it necessary to control the quality of medicinal plant raw materials, taking into account not only traditional pharmacopoeial indicators, but also the requirements of environmental cleanliness, since phytopreparations obtained from medicinal plant raw materials may contain ecotoxicants (xenobiotics), the receipt of which, even in small quantities, carries a certain degree of risk to human health.

Microbiological purity is the most important indicator of the safety of the use of medicinal plant raw materials and preparations derived from it, especially decoctions and infusions. Infection of medicinal plant raw materials with microorganisms is possible starting from the stage of preparation, including drying, primary processing, grinding and packaging .



The purpose of the work. Determination of microbiological purity and general contamination of fenugreek grown in the conditions of the Turkestan region on the Kaskasu site.

Research objectives. 1. To study the influence of the environment on microbial contamination of fenugreek. 2. To assess the prospects for the introduction in the Turkestan region at the Kasku site.

Material and methods of research: The seeds of fenugreek, grown in the conditions of the Turkestan region on the Kaskasu site, became the material for the study. To determine the microbiological purity, the methods of the SP RK I edition were used.

Results. The table shows the results of studies on the quantitative composition of microflora.

№	Name of indicators, units of measurement	Regulatory documents for test methods	Requirements of Regulatory documents	The actual results obtained
1.	Total number of viable aerobic microorganisms in 1,0 ml.	SP RK 1. t.1, a.2.6.12, pag.176.	$\geq 10^5$	Less than 10
2.	Fungi in 1,0 ml.	SP RK 1. t.1, a.2.6.12, pag.176.	$\geq 10^5$	Less than 10
3.	Escherichia coli in 1,0 ml.	SP RK 1. t.1, a.2.6.12, pag.176.	Absent	Absent

Conclusion. As follows from the data presented in the table, the studied samples of raw materials meet the regulatory requirements for microbiological purity. This gives reason to talk about the further prospect of introducing in the Turkestan region on the Kaskasku site, where resorts are located and many agricultural objects are cultivated.