Brief information about the project

Name of the project	«Research on the Application of Supercritical Carbon Dioxide Extraction Instrument for Bulk Spices Plant Resources in Central Asia»
Relevance	This topic about the study of the application of a device for supercritical carbon dioxide extraction for bulk plant resources of spices in Central Asia is relevant since such technologies can significantly improve the extraction of valuable components from spices. This may lead to the development of effective methods for obtaining high-quality extracts that can be used in the food, pharmaceutical or cosmetic industries.
Purpose	Research on the Application of Supercritical Carbon Dioxide Extraction Instrument for Bulk Spices Plant Resources in Central Asia
Objectives	1. Development of a supercritical carbon dioxide extraction technique for collecting spices in Central Asia. 2. Determination of optimal extraction parameters, such as pressure and temperature, for maximum preservation of biologically active substances. 3. Investigation of the chemical composition and qualitative characteristics of the extracts obtained. 4. Evaluation of the effectiveness of the device for scaling the production process. 5. Analysis of the economic feasibility and the possibility of introducing the developed technologies into industry.
Expected and achieved results	1. Development of an optimized supercritical extraction technique for bulk spice plant resources. 2. Obtaining high-quality extracts with improved properties and high content of biologically active substances. 3. Determination of the process parameters that ensure maximum extraction efficiency. 4. Research on the potential applications of these extracts in various industries such as the food, pharmaceutical and cosmetic industries. 5. Checking the possibility of scaling the technology for industrial production. 6. Analysis of the economic benefits and prospects for the implementation of the developed techniques in production processes.
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List of publications with links to them	-
Patents	-