Results of chemical and pharmacological research of sulphide peloids of Adjara region

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The use of natural healing factors for the treatment and prevention of various diseases represents the one of the actual tasks for modern medicine. The introduction of balneological methods of the treatment at the resorts as well as outside of them promotes the effective improvement of population’s health.

In the world today, the demand for the preparations and cosmetics, made on peloids is increasing significantly, which is explained by the increased interest of the society to the ecologically clean raw materials of natural origin, they often replace expensive chemical preparations, which are frequently accompanied by some contraindications. The increased interest in peloids in the world put on the agenda the question of rational use of acting mud mines as well as the issue of cosmetic and medicinal preparations, developed on their basis. In the available literature there is found no data on the research of sulphide peloids of Adjara region with the purpose of their application in medical practice.

The aim of our research was to carry the chemical and pharmacological research of sulphide peloids of Adjara region with the purpose of their application in medical and pharmaceutical practices.

By using the physical-chemical and modern instrumental methods of analysis the chemical compositions of sulphide peloids have been studied, the contents of important balneological components have been stated in the study objects. The physical-chemical and technological characteristics of peloids have been determined. The content of bacteriophages in the study objects have been established by using the standard biological methods of analysis.

On the basis of the conducted studies the formula and technology of preparation of the hydrogel on Ardagani lake sulphide silt peloid have been developed, it’s anti-inflammatory activity has been established using formalin induced rat hind paw edema model.

The results of determination of the main good-quality characteristics of the given hydrogel provide the desired quality and efficiency of the product.