

THE STUDY OF HIGH-QUALITY VALUES GEL "LAGODEN"

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The relevance of work: the study of quality indicators of any drug is the main criteria for their production. Study uniformity, pH environment, mechanical and the temperature stability of soft dosage forms of is as theoretical as well as practical interest, as they are the objective characteristics of quality.

The purpose of work is a study of high-quality indicators gel "Lagoden".

Materials and methods: studies used gel "Lagoden" composition: Lagoden – active substance carbopol – gelling agent, sodium hydroxide – neutralizing agent, glycerin – component, improves absorption of the current substance mixture nipagin and nipasol – preservative. Active substance is obtained from the substance plant – *Lagochilus Inebrians* Bunge. Lagoden is sodium salt of labdan acid (Fig. 1).

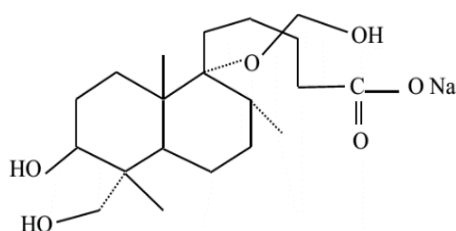


Fig. 1. The structure of Lagoden

In the experiments using chemical methods qualitative analysis of drugs. pH environment identified in the potentiometer EV-74. Stability identified in centrifuge SUM-1.

Results and their discussions: in order to study of homogeneity gel took 4 sample on 0,02–0,03 g and caused to the surface subject mirrors, closed with other glass. Slowly pressing the glass have created a spot in diameter 2 see and checked the presence of prominent particles with eyes. Any public cases not observed visible particles. pH gel identified potentiometric by: 5,00 g gel was heated to 323–333 K with 50 ml water, and then intermixed in the magnetic mixing machine. Filtered the contents of the flask through the "ash-free filter" and identified pH environment filtrate potentiometer (calomel reference electrode). Set the value of pH gel is 7,82. Stability gels to centrifugation defined as follows: 5,00 g hitch gel was centrifuged a machine SUM-1 at 1500 rpm / minutes for 5 min. It was no bundle gel or allocation of the liquid part of the gel. For the study of the impact of temperature on the gel 10,00 g gel was placed in a closed, dried porcelain cup diameter 4–5 cm and left in the thermostat at a temperature of 333 K 2–3 minutes. As a result of heating no change in the structure and appearance drug not observed.

To determine the authenticity made two reactions. The presence of diterpenes skeleton proved the reaction of the drug mass 0,2 g with 1 ml concentrated sulfuric acid on the water bath at a temperature of 333 K to 2–3 minute. At the same time there was a yellow color, to your queue passed in red, then in the dark red. In another experiment 1,2 g gel was stirred with 2 ml water and added 2 ml 20 % solution of sulfuric acid. As a result of the reaction was formed white precipitate was that proves the presence of lacton ring.

Conclusions: according to the results carried out analyzes (determination of uniformity, pH environment, mechanical and the temperature stability) found that gel "Lagoden" has a satisfactory quality values.