

The suppositories are dispersed systems, which consist of a dispersed phase in which the acting components act as the dispersion medium, which is the carrier base.

Local, intravaginal administration of drugs in infectious and inflammatory diseases provides direct action on the lesion, the possibility of regulating the process of treatment by pharmacokinetics, avoiding the inactivating effect of several enzymes and reducing the degree and frequency of side effects. In order to expand the range of probiotic drugs for the treatment of vaginal candidiasis, it is expedient to develop the composition and technology of a new domestic medicinal product based on interferon, antimycotics and probiotics.

STUDYING OF NUTRIENT MEDIA FOR *PARAMECIUM CAUDATUM* CULTIVATION

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Introduction. Today, *Paramecium caudatum* is one of the promising objects in biotechnology. They can be used in biological testing in ecological and toxicological laboratories; in addition, biomass of paramecium can serve as a starting feed for young fish and a source of valuable animal protein. Paramecium plays a special role in assessing the state of the environment. The last time there is a tendency to use single-celled organisms (paramecium) as a test-object for research in pharmacy (pharmacological and toxicological studies), because they represent a tiny copy of a multicellular organism. For the vital functions of living organisms, namely paramecium, an environment of a well-defined chemical composition is required. When changing this composition, for example, with the exclusion of any component from the nutritional medium, or the administration of an additional compound, the body immediately or after some time submits an appropriate signal.

Aim. Study of nutrient media for the cultivation of *Paramecium caudatum* and the choice of the most optimal medium for the further using in biological testing.

Materials and methods. As a biological test object *Paramecium caudatum* was used, as a nutrient media – the medium based on hay infusion, the medium based on lettuce leaves and modified medium Lozina-Lozynsky. We cultivated paramecium for 11 days at a temperature of 25 ± 2 °C, fed paramecium of the baking yeast (species *Saccharomyces cerevisiae*). Uniform biological and physicochemical research methods were used for research.

Results and discussion. In conducting research to study the cultivation, growth rates and morphology of *Paramecium caudatum*, a nutrient medium based on hay infusion, the medium based on lettuce leaves and modified medium Lozina-Lozynsky were used. During experiments, it was found that not all nutrient media are equally suitable for paramecium cultivation. Thus, in the nutrient medium from the leaves of lettuce, the small activity of the paramecium was noted, and a small number of cells at the beginning of cultivation (6-th day) compared with the nutrient medium prepared from hay infusion, where the relatively active *Paramecium caudatum* cells were observed. The isolation of pure culture from the nutrient medium based on salad leaves was complicated by the fact that small paramecium and amoebae appeared at first, and *Paramecium caudatum* only on the sixth day of cultivation. In Lozina-Lozynsky nutrient medium, the intensive growth of paramecium was noted throughout all cultivation days and the clear culture of paramecium was most straightforward, as they appear from the first day of cultivation. Paramecium have high activity and are large enough in size.

Conclusion. Among the three studied nutrient media, it was found that *Paramecium caudatum*, which was grown on the modified nutritional medium of Lozina-Lozynsky, has a higher activity, larger size and the number of their cells is larger than that grown on two other nutrient media, therefore, for further development bioassay using paramecium was chose the nutrient medium of Lozina-Lozynsky.