Conclusions. Technological parameters of dry extracts for creation of hard gelatin capsules are studied. It is established that all of them have unsatisfactory technological properties.

STUDY OF ANTIMICROBIAL ACTIVITY GALINSOGA PARVIFLORA

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Introduction. Galinsoga small-flowered (small-flowered) is an annual herbaceous plant of the aster family. The homeland of the galinsoga is South America, from where it was imported to Europe, after which it quickly spread throughout the territory, including Ukraine. They show different types of biological activity. In the extracts of the herb Galinsoga were identified lactic, succinic, tartaric and ascorbic acids, proteins, polysaccharides. The plant in folk medicine of many countries is used to treat diseases of the oral cavity, as a hemostatic, antihypertensive, hemostatic agent, for the treatment of dermatological diseases, scurvy and goiter.

The aim of the study. Study of antimicrobial activity of juice from the herb Galinsoga small-flowered in the conditions of in vitro and evaluation of the prospects of creating a drug with antimicrobial action based on this substance.

Materials and methods. Antimicrobial activity was studied by double serial dilutions in a liquid nutrient medium - meat-peptone broth - for bacterial cultures and Saburo broth - for a culture of a fungus of the genus Sandida. The microbial load was 10^6 microbial cells per 1 ml of medium. The maximum dilution of samples in vitro in the absence of culture growth was estimated as the minimum inhibition of microbial growth concentration (IPC). 70% ethyl alcohol was used as a solvent , the antimicrobial activity of which was eliminated by dilution to an inactive concentration and using ethyl alcohol as a control. References of microorganisms from the American typical collection of cultures were used in the experiment: Staphylococcusaureus ATCC 25923, Escherichiacoli ATCC 25922, Pseudomonasaeruginosa ATCC 9027, Bacillussubtilis ATCC 6633 and a fungus of the genus Candida8585.

Obtained results. According to the results of the experiments, samples of the juice of the small-flowered Galinsoga grass showed no antimicrobial activity against gram-negative bacteria E. coli and P. aeruginosa, as evidenced by signs of growth of these cultures of microorganisms in the first tubes with dilutions of samples, which was confirmed by smear microscopy. No activity was detected against the spore-forming culture of Bacillus subtilis. At the same time, insignificant antimicrobial activity of the samples against the culture of Staphylococcus aureus and Candida albicans was detected .

Conclusions. Detection of antimicrobial activity of small-flowered Galinsoga juice against Staphylococcus aureus and Candida fungi requires further studies using cultures of other gram-positive bacteria, including those that are important as etiological factors in infectious pathology, including clinical strains. Simultaneous

detection of a small level of antifungal activity allows to predict the possibility of use in dermatological practice.

SELECTION OF AUXILIARY COMPONENTS FOR THE DEVELOPMENT OF A SOFT PREPARATION FOR PROBYOTIC COMPONENTS

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Introduction. In skin care products, probiotics can help restore the skin's natural balance by ensuring that it functions properly and is replenished with the necessary nutrients to stay protected from harmful factors and fight the signs of aging and environmental damage. Probiotics are also an effective anti-inflammatory, helping to relieve redness, irritation and skin conditions, including acne, rosacea and dry skin [1].

Therefore, the creation of effective means of correction and/or maintenance of human normoflora to maintain a healthy skin microbiome today is an urgent task.

The aim of the study. Selection of excipients in a new mild skin preparation with probiotic.

Materials and methods. The main active ingredient of the drug are lactobacilli, the introduction of which was carried out in the form of biomass of the drug "Lactobacterin dry", which is a microbial mass of live, antagonistically active strains of *L. fermentum* 90T-C4, *or L. fermentum* 39, or *L. plantarum* 8P-A3, or *L. plantarum* 38, lyophilized in the culture medium with the addition of a protective medium. As gelling agents used acrylates, which are stable, inexpensive, technologically convenient: Sepiplus 400, Carbopol 934 and Aristoflex AVC, as solvents - glycerin, propylene glycol, polyethylene glycol, emulsifier - polysorbate-80.

In the analysis of the components when creating the emulsion phase, the linear size and shape of the particles were determined by microscopic method. The number of living microorganisms, expressed in CFU, was determined by the method of ten-fold dilutions, followed by surface seeding on the nutrient medium MRS-4. The acidification activity, expressed in degrees Turner, was determined by titrometric method, titrating with 0.1 M sodium hydroxide solution with the addition of phenolphthalein indicator until a stable pink color [3].

Obtained results. Specificity of the created tool, and puts forward a number of requirements for the preparation of the dosage form. The basis and parameters of the production of living biotherapeutic drugs, in the first place, should ensure the viability of cells and the preservation of their probiotic activity.

Therefore, the main problem with the use of live lactobacilli in the base is to preserve their survival and stability. Analyzing foreign technologies for the production of soft dosage forms with probiotics, we have identified the following approaches to the introduction of the optimal basis of the probiotic component in the form of: lyophilized biomass and stabilized liquid bacterial culture, previously converted into a gel state by adding surfactants [2].