STUDY OF THE PROTECTIVE EFFECT OF THE MEDIUM WITH AEROSIL DURING LYOPHILIZATION AND STORAGE ON THE STUDIED CULTURES YERSINIA SPP.

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The most expedient and accessible on this time method of long duration storage of most strains of microorganisms in collections is lyophilization. For freezing and further sublimation drying it is better to use cages in the stationary phase of height, when the most level of accumulation of bacteria is arrived at, intensity of exchange processes goes down, there is an increase of firmness of cages to freezing and drying.

An important value for successful lyophilization. has a choice of protective suspension environment.

As a rule, drying of microorganisms conduct in colloid solutions, for example, in milk, gelatin and other In composition of suspension protective environments enter substances, that reduce the point of crystallization of water, that prolongs the term of cooling of cages and terms are created for avoidance of pernicious action of crystals of ice, and also display of protective action at drying.

The object of researches were 4 stamms (Yersinia enterocolitica — 1 strain, Yersinia pseudotuberculosis — 2 strains, Yersinia kristensenii — 1 strain), distinguished in Ukraine during realization of bacteriologic examinations of objects of veterinary-sanitary supervision and 3 strains (Yersinia enterocolitica, Yersinia rockery — 1 strain, Yersinia kristensenii — 1 strain) got from collection of "Microbiologocs" (The USA).

The results of the effect of protecting the environment with the content of Aerosil during freeze-drying and storage on the studied cultures Yersinia spp. (Collection NCSM State Scientific Control Institute of Biotechnology and Strains of Microorganisms) during lyophilization and storage. The findings suggest the feasibility of using this protective environment in the process of freeze-drying and storage of crops Yersinia spp.

Keywords: YERSINIA, PROTECTIVE ENVIRONMENT, AEROSIL, LYOPHILIZATION.