## THE STUDY OF BIOGENIC STIMULATORS ON THE BASIS OF BEE PRODUCTS

Demidova I. V., Maslak V. M., Strelnikov L. S., Kalyuzhnaya O. S. National University of Pharmacy, Kharkiv, Ukraine demidova.irina.vna@gmail.com

Introduction. Biogenic stimulators are biologically active substances that stimulate regeneration and metabolism processes in the body and have a tonic influence. Bio-stimulators show some biological activity and non-specific stimulatory effect on the body metabolism. Bio-stimulators are used for stimulating and improving the metabolic processes in the body in case of inflammatory degenerative and atrophic diseases. Natural bio- stimulators include hive products; they have properties to stimulate the metabolic processes in a human body. One such product is royal jelly, the main principle of the biological effects of which is the improvement of the human body' immune system to the highest level, when it independently copes with a variety of diseases.

**Results and discussion.** The composition of royal jelly is very complex. The chemical composition of it is a combination of various components in proportions Compliant physiological needs of the living organism. The main components of royal jelly:water - 60-70% proteins (albumin and globulins represented) - 10-18% carbohydrates - 9-15% fat - 1,5-7% minerals - 0.7-1.5%

All the basic properties necessary for building and well-being of a human organism have been found in the composition of the royal jelly such as: amino acids, proteins, vitamins, fats, carbohydrates, enzymes, fatty acids and hormone-type substances. According to the conclusions of the experienced scientists bee royal jelly in its composition has a balanced mix of micro-elements useful for the human body. Due to which this natural remedy has special pharmacological effects. The composition of the royal jelly also contains deoxyribonucleic acid (230-240 mg/g), contributing to the rejuvenation of the body, as a result of the regenerative effect directly on the aging tissue and cells.

Royal jelly is a phenomenal product of beekeeping and is a very powerful biological stimulator. It is widely used for the prevention of complex diseases of different kinds; there are also data on the improvement of women's separation of milk who are breastfeeding a child with regular admission of royal jelly.

**Conclusion.** Due to the high biological activity of royal jelly, we are interested in the possibility of its use as part of biogenic stimulators, the development of composition and the technology of which are being carried out at the Biotechnology Department at the National University of Pharmacy of Ukraine.