

# DEVELOPMENT OF TECHNOLOGY FOR PRODUCING COMPOUND THICK EXTRACT OBTAINED BY COMMON EXTRACTION OF THYME, YARROW, CHAMOMILE AND EUCALYPTUS

Kha Dyk An, Kukhtenko O. S., Gladukh Ie. V.

National University of Pharmacy, Kharkiv, Ukraine

kukhtenk@gmail.com

**Introduction.** Medicinal herbs have invaluable treasures that were used yet in ancient times and their potential is not completely studied. Synthetic active pharmaceutical ingredients have powerful therapeutic activity, but they are inherent also side effects. In recent years, has accumulated a lot of data on the negative impact of substances that were previously considered safe. So important is the development of drugs based on plant material. On the basis of literary analysis has been selected herbs composition of thyme, yarrow, chamomile and eucalyptus, used to treat respiratory diseases. Inflammation of the airways is the most common disease among people of all ages. The development of drugs based on standardized complex dense extract will expand the range of pharmaceutical market and reduce its import-dependence.

**The aim of the study.** The aim of the scientific research was to determine the concentration of water-alcohol solution for carrying out bioactive substances extraction process from medicinal plant raw material.

**Materials and methods.** The objects of research were thyme herb, yarrow herb, chamomile flowers and leaves of eucalyptus. Were used 30%, 40%, 50%, 60%, 70%, 80% water-alcohol solutions. Medicinal herbs took in equal proportions. Definition of extractive properties of water-alcohol solutions was performed by determining the amount of extractives. Research performed by the method described in the USSR SP XI, Ed. 1. Determination of the amount of dry residue was performed using express thermogravimetric moisture analyzer MA 150 of the company «Sartorius», Germany.

**Results.** As a result of studies it has been found that the maximum extraction properties has 70% water-alcohol solution, providing a yield of extractives in an amount of 17%.

**Conclusions.** Based on the results obtained for the joint extraction process by percolation experimentally proved the use of 70% aqueous-alcohol solution.