

**DEVELOPMENT OF OBTAINING TECHNOLOGY
FOR DENSE EXTRACT OF CARDIOLYTIC ACTION
AND TABLETS ON ITS BASE**

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Introduction. Cardiovascular diseases occupy the first place among the most widespread and dangerous diseases of our time. There are many reasons for this, but the genetic predisposition and wrong way of life are considered basic. One of the most acute problems of modern health is myocardial infarction, and its incidence curve is steadily creeping up. Despite all the achievements of world medicine in this field, so far mortality from myocardial infarction ranks first in all economically different countries, including Ukraine, 2-3 times exceeding the death rate from cancer.

As a result of the analysis of the pharmaceutical market in Ukraine, the following were selected as research subjects: hawthorn fruits, the therapeutic effect of which is to increase myocardial tone, slightly increase cardiac muscle contractions, reduce myocardial excitability, eliminate vascular spasms, and enhance blood circulation in the vessels of the heart and brain.

Herb of Leonurus – regulates the functional state of the central nervous system, has a calming effect, reduces the increased nervous excitability. Melissa herb – indications for the use of Melissa herb remedies are: neuroses, mild form of hypertension, mild forms of coronary heart disease, tachyarrhythmias.

Hop cones have a calming, spasmolytic, analgesic and anti-inflammatory effect.

Aim of the study. Substantiation of technology for obtaining a thick extract and tablet mass with its content.

Materials and methods. To achieve the goal, physico-chemical and pharmaco-technological methods of analysis have been used.

Obtained results. The first stage of our studies on the way to obtaining a complex thick extract was the choice of the extractant, which would extract the BAS from the VRM as much as possible. The extracting activity of water-alcohol solutions of different concentrations was investigated. The criterion for evaluating the extracting activity was the amount of extracted extractives.

As a result of the research, it was found that 70% ethanol extracts the

maximum amount of extractives for all types of plant material.

The preparation of a thick extract initially involves obtaining a liquid extract and its further evaporation. To obtain liquid extraction, we have chosen the percolation method as the most rational and widely used in pharmaceutical industry. To substantiate the extraction rate, we studied the dynamics of the extraction of individual plant raw materials and at combined extraction of a mixture of VRM.

To obtain tablets containing a complex thick extract, model compositions of tablets were produced. For the preparation of tablets, lactose was used as a filler, sodium croscarmellose (disintegrant), microcrystalline cellulose (binder), talc and magnesium stearate (antifriction substances).

The tablets were prepared by wet granulation. As humidifier, alcohol 70%, 3% aqueous and alcohol solution of PLASDONE 25K were used. The complex thick extract was added to the bulk solids, previously dissolved in the humectant solution. Tablet masses were subjected to the study of pharmaco-technological properties.

Quality indicators for tablets were determined according to the requirements of the State Pharmacopoeia of Ukraine for such indicators: description, average tablet weight, crush resistance, friability, disintegration time.

Conclusions. The technology of a thick extract obtaining has been substantiated and the composition of tablets with its content has been developed.