

**DEVELOPMENT OF THE COMPOSITION OF EXTEMPORAL
MEDICINAL PLANT SPECIES
FOR THE COMPLEX TREATMENT OF HYPERTENSION**

Kolodko Ye. O., Zujkina S. S.

Scientific supervisor: assoc. prof. Zujkina S. S.

National University of Pharmacy, Kharkiv, Ukraine

zujkin.svetlana@yandex.ua

Introduction. Arterial hypertension is a common disease. In case of mass measurements of blood pressure 20 – 30 % of subjects show the elevated figures. In the implementation of the stage-by-stage examination method of arterial hypertension, this disease is diagnosed, on the average, in 65 % of cases, while in 35 % symptomatic forms are found.

Medicinal plants, which have diuretic, sedative, hypotensive effect, are widely used in the treatment of hypertensive disease

Aim. The purpose of our research was the study of technological parameters of medicinal plant raw material in the development of extemporal species for the complex treatment of hypertonic disease.

Materials and methods. The orthosiphon leaves, birch leaves, peppermint leaves, motherwort herb, mountain ash fruits, valerian rhizomes with roots were selected as the objects of research, based on their chemical composition and pharmacological properties.

Determination of the moisture content was carried out on a Sartorius MA-150 moisturemeter. The shape, size and nature of the surface of the powder particles were determined with the use of the Item PB-2610 microscope equipped with a micrometer grid at a magnification of 1000 times. The determination of the fractional composition was carried out according to the procedure given in SPU. Technological parameters (specific, bulk, voluminous, angle of natural slope) of the raw materials were determined according to the methods of Vetrov, given in the literature. Based on the obtained results, the porosity of the raw material, the variability and the free volume of the layer were calculated.

Results and discussion. Such technological parameters of the medicinal plants and the developed extemporal species humidity, fractional composition, shape and particle size, wettability, hygroscopicity, bulk, variability, specific mass were studied; porosity and variability values of raw material and free volume of the layer were calculated.

Conclusions. The results of the conducted studies allowed offering extraction conditions and predicting the choice of packaging of the extemporal phytomedicine for the complex treatment of hypertensive disease.