

# STUDY OF THE INFLUENCE OF THE EXTRACTION PARAMETERS WHEN OBTAINING WATER EXTRACTS OF THE DEVELOPED COLLECTION

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**Introduction.** One of the important stages in the complex of research in the creation of new drugs is the substantiation of rational extraction modes. Since the medicinal product in the collection form is a solid dosage form, it is used in medical practice in the form of infusions, decoctions or herbal teas, the justification of the optimal manufacturing conditions for both the collection itself and the aqueous extracts from it should be based on com-complexes of pharmacological technologies.

**Aim.** The purpose of our research was to study the effect of the type of solvent, dispersion of medicinal plant raw materials and other technological parameters on the extraction of the collection for the treatment of gastric ulcer.

**Materials and methods.** The process of obtaining an extract from a herbal medicinal collection is focused on the maximum yield of biologically active substances. Since the extraction of biologically active substances from the cells of medicinal raw materials occurs due to extraction, it was advisable to study the influence of various pharmaceutical factors on the yield of extractive substances.

**Results and discussion.** In order to study the influence of pharmaceutical factors on the release of extractives from medicinal plant raw materials, three collection fractions were investigated, identical in composition, but different in the degree of grinding of components, which were obtained by sieving through sieves No. 1-5. Medicinal raw materials were crushed by grass cutters. The size of the particles of the first fraction was 1-3 mm, the second fraction – 3-4 mm, the third – 4-6 mm. As a result of the studies carried out, a certain dependence of the yield of extractives from medicinal plant materials on the degree of its dispersion was established. When grinding raw materials to a size of 1-3 mm, higher rates of release of extractives are observed due to the destruction of medicinal plant cells. With particle sizes of 3-4 and 4-6 mm, there is a decrease in the release of extractive substances and, accordingly, the values of the dry residue indicators.

**Conclusions.** On the basis of the results obtained, for further studies to substantiate the extraction parameters, the MPM fraction 1-3 mm was selected. To optimize the extraction conditions, we studied the yield of extractive and biologically active substances from medicinal plant materials with a grinding degree of 1-3 mm under various extraction modes.