

DEVELOPMENT OF THE TECHNOLOGY OF THE HYDROPHILIC COMPLEX OF BUPLEURIUM AUREUM

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Introduction. Widespread and aggressive advertising of drugs, their use without appropriate medical control are responsible for a significant increase in the incidence of the negative effects of drugs on the human health.

Side effects of drugs become one of the important problems of modern medicine, and it is topical to find ways to reduce the negative impact of side effects of drugs on our health. One of the first organs that are suffering from uncontrolled use of drugs is the liver. Drug damage of the liver is one of the main problems of hepatology.

It is possible to prevent the liver damage by drugs with creation of complex drugs, which composition includes hepatoprotectors contributing to preservation and restoration of the damaged liver tissue in addition to the main active component.

The pharmacological screening of some plant extracts has shown a high hepatoprotective activity of the aqueous extract of Bupleurum Aureum herb in prevention of the hepatotoxic effect of a number of sulfanilamides.

Aim. Development of the technology for the hydrophilic complex of Bupleurum Aureum herb with the purpose of its further inclusion in the complex antimicrobial sulfonamide drug and prevention of hepatotoxic side effects of the main active pharmaceutical ingredient.

Materials and methods. Extraction of Bupleurium Aureum herb with ethyl alcohol of different concentrations or with water by the method of fractional maceration when heating was conducted in a round-bottomed flask under reflux while heating on a boiling water bath.

Results and discussion. The extractin of Bupleurium Aureum herb with water on a boiling water bath the total yield of extractives calculated with reference to the dry raw material was 35.4%

The extraction of Bupleurium Aureum herb with ethyl alcohol of different concentrations when heating has been conducted. The yield of extractives was 18.26% when extracting with ethyl alcohol of the concentration of 40%; 49.13% – when extracting with ethyl alcohol of the concentration of 50%; and 40.00%, – when extracting with ethyl alcohol of the concentration of 70%.

Conclusions. The more appropriate method of removing the hydrophilic complex for the Bupleurium Aureum herb – is extraction with ethyl alcohol when heating to the boiling point, it provides extraction.