

STUDY OF ETHANOLIC AND WATER EXTRACTS OF BUPLEURUM AUREUM ON SPONTANEOUS HEMOLYSIS UNDER THE METHOD JAGER F.S.

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Today medicine has made considerable progress in the treatment of many diseases. However, many drugs, except medical action, have a number of side effects, leading to sensitization of the organism. Main organ, that sureference drugorts detoxification and excretion of drugs and their metabolites is liver. Drug-induced liver injury is about 10% of all adverse reactions and today remains one of the major problems of hepatology and pediatrics. Despite the rather wide arsenal of hepatoprotective drugs, the problem of effective therapy for liver injury remains unresolved, which causes the urgency of finding or creating new efficient drugs. From this perspective herb *Bupleurum aureum* draws attention. In traditional medicine this plant is used as an effective remedy for diseases of liver, gallbladder and pancreas. However, the main indications for use are cholecystitis and hepatitis. In view of the above, *Bupleurum aureum* is a promising object for development of new drugs of hepatoprotective action.

Aim of work was to determine the properties of water and ethanolic extracts of *Bupleurum aureum* on a model of spontaneous lysis of erythrocytes. Experiments were conducted on white outbred male rats weighing 180-200 g. As a reference drug was used antioxidant vitamin E (50 mg / kg) and pellets of quercetin (50 mg / kg). Study drugs were administered intragastric to animals in doses of 5 mg / kg daily. Control animals received water. On 14 day of the experiment in blood samples obtained from the tail vein of rats was determined the degree of lysis of erythrocytes by the method Jager FS.

According to the received data, the most pronounced membrane stabilizing action showed ethanolic extract, its activity was 37%, slightly lower 25% - reference drug vitamin E, and the lowest - water extract (13%) and reference drug quercetin (12%). It should be noted that concerning the expressive membrane stabilizing action ethanolic extract of *Bupleurum aureum* was significantly higher than the water extract and reference drug quercetin and was equal to reference drug vitamin E. Taking into consideration, that membrane stabilizing action is the result of antioxidant properties, we can assume the presence of the latter in the ethanolic extract of *Bupleurum aureum*.

So, on the model of spontaneous lysis of erythrocytes was determined membrane stabilizing properties of studied extracts, as for expressive action, ethanolic extract of *Bupleurum aureum* was equal to vitamin E and exceeded the activity of water extract and reference drug quercetin.