INVESTIGATION OF MEMBRANE-STABILIZING ACTION OF EXTRACTS FROM *PRUNUS DOMESTICA* FRUITS

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Introduction. *Prunus domestica* is a horticultural crop widely distributed in Ukraine. The determination of the qualitative and quantitative composition of the *P. domestica* showed the presence of unique chemical compounds with probably laxative and hepatoprotective effects. According to literature data, fruits of *P. domestica* are quite popular in folk medicine for the treatment of gastrointestinal tract and liver diseases. Therefore, the investigation and confirmation of the hepatoprotective properties of extracts from *Prunus domestica* fruits are very actually.

The aim of the research. Therefore, the aim of this study was to investigate membrane-stabilizing activity of two out of four extracts from *Prunus domestica* fruits having an evident hepatoprotective effect proved in the previous experiments.

Materials and methods. Membrane-stabilizing activity of extracts from *Prunus domestica* fruits was studied *in vitro* using the F.C. Jager method based on the determination of ectoglobular hemoglobin entering the blood due to spontaneous lysis of red blood cells membrane caused by lipid peroxidation.

Results. Administration of investigated extracts to animals lead to decreasing in the degree of spontaneous RBCs hemolysis by 56.1% and 26.8% compared with the control group. The extract with fibers was more active in stabilizing of RBCs membranes exceeded the activity of the extract with polysaccharides, and somewhat inferior to the activity of the reference drug (Silibor).

Conclusions. Between the two presented extracts from *Prunus domestica* fruits the most active extract was extract containing fibers. This extract at a dose of 200 mg/kg reduced significantly the degree of spontaneous hemolysis because of inhibition of RBCs membranes degradation induced by lipid peroxidation and slightly inferior to the membrane-stabilizing effect of the reference drug Silibor. The obtained results related to the presence of polyphenolic compounds in the chemical composition of the extract (hydroxycinnamic acids).

INFLUENCE OF EXTRACT FROM *PRUNUS DOMESTICA* FRUITS ON THE FUNCTIONAL STATE OF THE INTESTINE IN RATS WITH ALCOHOL LIVER DAMAGE

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Introduction. Ever since ancient Greece, it was known about the liver, as one of the most important organs of the human body. The liver is the most massive organ in our body, the largest gland. Everything that we absorb through the respiratory system, the skin or the digestive tract, the liver, as a «chemical factory», processes into necessary substances. In addition, the toxins that have come along with the bloodstream, the liver neutralizes and removes from the body. This unique organ is involved in more than 500 biochemical reactions of the organism. The most common causes of liver damage are viruses and alcohol.

Therefore, the search for the most effective hepatoprotective agents is relevant. As a rule, herbal raw material is promising object for studying therapeutic properties. Based on the literature data, we are interested in horticultural crop *Prunus domestica*, family *Rosaceae*, which is sufficiently cultivated and attracts with its pharmacoeconomic component.

The aim of the research. In previous studies, laxative, hepatoprorective, and probiotic effects have been found in *Prunus Domestica* extract containing fibers. The above presented the opportunity to