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Biochemical study of hepatoprotective collection of plant origin

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Abstract

The article presents the results of biochemical studies of the total antioxidant activity of the hepatoprotective collection of plant origin and its individual components, which show that it consists of birch leaves (*Betulae folia*), tansy flowers (*Tanaceti flores*), phytohepatol No. 2 (choleretic collection No. 2) and individual its components have pronounced antioxidant activity. More antioxidant activity founded in tansy and true hepatoprotective collection. Comparative tests of the flowers of meadowsweet, with the highest antioxidant activity, showed the promise of their use in the collections of medicinal plants as effective natural metabolic regulators. The total antioxidant activity of the water extract collection at 13.56% rel. exceeded the calculated value obtained by summing the activities of the individual components of the collection, which indicates the presence of synergism in their action, which may be of value for use in the treatment and prevention of liver diseases. When all components of the drug collection are finished, the indicator increases by 11-24 % rel., which indicates the thermal stability of the antioxidant substances that make up their composition. In the oxidation of aqueous extracts of the components of hepatoprotective collection with hydrogen peroxide, the most stable were antioxidants of birch leaves. It was found that collection only at a ratio of 7.7 g per liter of water shows synergism (15 % rel.), and the rest of all the samples we tested are antagonistic. The detected increase in the antioxidant activity of the new collection compared with the effects of its individual components allows us to consider it as a promising dosage form for use in the treatment and prevention of liver diseases.

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