THE BIOLOGICAL ACTIVITY OF REPRESENTATIVES OF HEATH FAMILY (ERICACEAE)

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Heather in the broadest sense of the taxon is represented on the globe with 3000 species belonging to 100 genera. The list of indications for a clinical use of extracts from these plants is very limited. At the same time, in the folk medicine plants of this family have been widely and successfully used for the treatment of many diseases for a long time. Available information obout the chemical composition of the plant heath family indicates the presence of different classes of biologically active substances (BAS): flavonoids, phenol carbonic acids, coumarins, essential oils, triterpene compounds, and some others. Finally, the experimental pharmacological studies of the biological activity of the extracts from plants of the family Ericaceae indicate a wide range of their effects on the body. These data substantiate the prospects of using some representatives of the heath family to develop new high-performance low-toxic drugs, which is the topical problem of the modern pharmacy and pharmacology. The most promising one among the studied species of the heath family is Ledum palustre, which is characterized by a combination of a wide spectrum of biological activity, low toxicity, significant, renewable, operational stocks of raw materials.

The aim of this experimentation is to investigate the antioxidant properties of the Rhododendron tomentosum Extract.

The study has been conducted on the antioxidant activity of the experimental hepatitis model, which has been caused by an intragastric administration of carbon tetrachloride (CCl4). The state of the antioxidant system has been determined in serum and liver tissues in the level of TBA-reactive substances (TBA-AP) and reduced glutathione (WG). The experimental data suggest the presence of the antioxidant activity in the studied extracts made of Rhododendron tomentosum. This is confirmed by the normalization of the level of TBA-PA to the level of the intact animals and increased in comparison with the untreated pathology, the number of SH.

Thus, BAR (mainly polyphenolic compounds) that are the parts of the extracts made of Rhododendron tomentosum, are able to normalize the processes of free radical oxidation and antioxidant system to stabilize the hepatocytes.