PERSPECTIVE PLANT RAW MATERIAL THAT HAVING AN IMMUNE-STIMULATING AND METABOLISM-NORMALIZING ACTIVITY

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Actuality. High morbidity and death of farm animals, especially young animals, significantly reduces growth of domestic production of animal husbandry. Improvement of veterinary care of animal husbandry, development of the most effective methods and means of prevention and treatment of widespread diseases of domestic animals, including farm animals, is an urgent task of veterinary pharmacy. Intensive development of animal husbandry is possible only under the conditions of a high level of veterinary care for animals, which depends on the provision of veterinary services with medical and preventive means. An increase in the supply of medicines for the needs of animal husbandry and veterinary medicine is mainly possible due to the development of domestic veterinary pharmaceutical production.

The trends of scientific and technical progress in the 21st century have not only positive consequences for humanity, but also for flora and fauna. Today, a number of diseases that are more characteristic of humans also occur in domestic animals. The advantages of using medicinal plants in veterinary medicine are beyond doubt. Firstly, it is an organic union of flora and fauna in nature. Secondly, it is an availability in terms of cost and volume of use. Thirdly, the possibility of long-term using, fourthly, low toxicity and due to the diverse chemical composition the possibility of using in the multi-vector direction for the treatment of several diseases at the same time.

A positive effect on immunity and normalization of the work of the musculoskeletal system is inherent to natural compounds that have a powerful antioxidant effect. Therefore, medicinal plant raw materials (MPRM), which primarily exhibit antioxidant effects, have prospects for use as objects for the creation of new immunostimulants and agents that improve metabolism.

The Aim of research was to select the most promising plants for further research for the creation of drugs with an immune-stimulating and normalizing metabolism effect with the help of content analysis and screening by express methods *in vitro*.

Materials and methods. There were obtained extracts under the same conditions from 35 types of MPRM (underground organs, grass, leaves, buds, flowers) of plants of the families Asteraceae, Betulaceae, Boraginaceae, Crassulaceae, Equisetaceae, Fabaceae, Paeonaceae, Polygonaceae, Poaceae, Rosaceae, Tiliaceae and Uricaceae. Antioxidant activity was determined spectrophotometrically on a test system using DPPH dyes (2,2-diphenyl-1-picrylhydrazyl). The unpaired electron of DPPH is transferred to an electron pair with a decrease in the optical density of the solution during the reaction of DPPH with an antioxidant. Ascorbic acid and dehydroquercetin were selected as reference drugs.

Results and conclusions. Thus, on the basis of the conducted research, a number of MPRM species of plants of the Asteraceae, Fabaceae, Polygonaceae, Rosaceae and Poaceae families were selected. It is possible to develop prescriptions of collections and galenic remedies for internal and external use from these plants and they are promising for use in the complex therapy of a number of minor and major diseases animal husbandry.