RESEARCH OF FLAVONOIDS OF DRY EXTRACT OF GRASS ASPERULA OCTONARIA KLOKOV

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Introduction. Ukraine is represented family Rubiaceae Juss. in the flora species and more than 50 of them to the eastern regions is typical Asperula octonaria Klokov. Earlier in the grass of Asperula octanaria been identified phenolic compounds (hydroxycinnamic acids, kumarins, flavonoids, tannic matters), iridoids, saponins, terpenoidss, in composition essential oil.

Aim. The aim of this work was to investigate the flavonoid extract of dried herbs Asperula octonaria, obtained by complex processing of raw materials.

Materials and methods. For this purpose an air-dry grass of Asperula octanaria was exhaustively extracted at first a chloroform, and then mixture, ethyl-acetate-96% ethanol (8:2). The dried meal was treated three times with hot water for 30 minutes in a boiling water bath. The resulting aqueous extracts were combined, filtered and evaporated to 1/3 original volume. The concentrate was treated with 96% ethanol at a ratio of 1: 3The precipitate is filtered polysaccharides. The filtrate was evaporated in a vacuum evaporator to dryness.

Research conducted flavonoids HPLC chromatograph on firm Agilent Technologies (model 1100), equipped with a flow vacuum degasser G1379A, 4-channel pump low pressure gradient G13111A, G1313A automatic injector, column thermostat G13116A, diodnomatrychnym detector G1316A. For the analysis using chromatographic column size $2,1 \times 150$ mm filled with sorbent oktadetsylsylilnym, grain size of 3.5 microns, «ZORBAX-SB C-18." The identification of compounds was performed by standard retention time and spectral characteristics.

Results and discussion. The study found dry extract 10 compounds, including not fully identified quercetin glycosides, diosmetynu 4 C-glycosides apigenin, apigenin-7-O-rutynozyd, diosmetyn-7-O-glucoside, rutin, quercetin. The dominant is apigenin derivatives (1.87%). Total flavonoid content in dry extract is 2.76%.

Conclusions. Identified compounds may explain the use of phytotherapeutic Asperula octonaria.