

## **STUDY OF QUALITY COMPOSITION OF LEAVES OF BURDOCK LARGE**

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The aim of the work is a previous study of qualitative composition of leaves of burdock large.

**Materials and methods.** The leaves of burdock large were prepared in the Vinnitsa and Kharkiv areas. We used test-tube reactions and chromatography on the paper and thin layer of sorbent for preliminary research of qualitative composition of the raw material.

Test-tube reactions were carrying out with the Feling's reagent of at heating (sugars), with 0.2% spirit solution ningidrin at heating (amino acids).

The chromatography on the paper was carried out in the systems of solvents: on the presence of sugars, phenolic acids and phlavonoids cleared n-butanol- acetic acid icy-water (4:1:2); was used on sugars – cleared n-butanol-piridin-water (6:4:3); on organic acids – cleared n-butanol-formic acid-water (4:1:5), cleared ethylacetate-formic acid-water (3:1:1); on phenolic acids and phlavonoids – 2%, 5% and 15% acetic acid. The chromatography in thin layer of sorbent was carried out in the system of solvents by a chloroform-alcohol methyl (9:1).

**Results.** The presence of sugars was confirmed by the results of positive reaction with the Feling's reagent (orange copper (II) oxide sediment was formed) and chromatography on the paper (where not less than three sugars, two of which were identified as D-glucose and D-fructose, were seen observed). Positive reaction from 0.2% spirit solution ningidrin before and after hydrolysis showed that raw material contained free and fixed amino acids. We identified organic acids (apple and lemon), phenolic acids (chlorogenic and ferulic), phlavonoids (kempherol and quercetinum) by chromatography on the paper.

**Conclusions.** At result of the research it was determined that the leaves of burdock large contain carbohydrates (D-glucose and D-fructose were identified), free and fixed amino acids, organic acids (apple and lemon), phenolic acids (chlorogenic and ferulic) and phlavonoids (kempherol and quercetinum). The obtained data will be used in further researches while determinating quantitative content biologically active substances in the leaves of burdock large.