

PRELIMINARY STUDY OF THE AMINO ACID COMPOSITION OF ARMENIACA VULGARIS L.

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Introduction. Common apricot (*Armeniaca vulgaris*) is a rather promising object for study. Apricot is widely used in the food industry, folk medicine, cosmetology, and aromalogy. The fruits are eaten both fresh and dried. Since ancient times, they have been used to improve the work of the cardiovascular system, for the treatment of some skin diseases and for hypo- and vitamin deficiency. Fruits contain a large amount of biologically active substances, including amino acids. The great importance of amino acids for the pharmacological activity of plant raw materials requires a study to determine their qualitative composition [1].

Materials and methods. Apricot fruits of the ordinary Shalah variety, harvested in Armenia, were used as the research object. 10.0 g of dry crushed fruits were extracted with 70% ethanol in a ratio of 1:10. Chromatographic analysis was performed using Filtrak FN-4 chromatographic paper in the solvent system n-butanol-acetic acid - water (4:1:2). For comparison, a standard set of amino acids (TU 6-09-3147-83) was used in a concentration of 0.1%. After passing through the solvent system, the chromatogram was treated with a 0.2% alcoholic solution of ninhydrin in acetone and placed in a drying cabinet, where it was dried at a temperature of 60-80° C. Amino acids were identified by their color, R_f value, and comparison with reference samples [2].

Results and their discussion. Apricot fruits contain the following amino acids: threonine, methionine, valine, isoleucine, leucine, phenylalanine, histidine, which are essential, as well as aspartic and glutamic acids, serine, proline, glycine, alanine, which are replaceable.

References:

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