STUDY OF THE FATTY ACIDS COMPOSITION OF APRICOT (ARMENIACA VULGARIS L.) FRUIT OF THE VARIETY SHALAKH

Andranik Kutsanyan * 1 Victoriya Georgiyants * 2 Alexandr Zinchenko * 3

- $1\ PhD\ student\ of\ pharmaceutical\ chemistry\ department,\ National\ University\ of\ pharmacy,\ Kharkiv,\ Ukraine;\ aka 130999\ gmail.com;\ +380667389933$
- 2 Head of pharmaceutical chemistry department National University of pharmacy, Kharkiv, Ukraine; vgeor@ukr.net
- 3 Head of the Laboratory of Pharmacopoeial Analysis at State enterprise Ukrainian scientific pharmacopoeial center for quality of medicines, Kharkiv, Ukraine; zn123@ua.fm

Introduction. "Pineapple" is one of the most popular varieties of apricot (Armeniaca vulgaris L.). However, this variety was first obtained in Yerevan (Armenia), where it is called Shalakh or Yerevanian. It has been cultivated throughout Armenia for many centuries. From there it was brought to other countries of the world. Despite its great popularity the chemical composition, pharmacological properties and use of raw materials from its historical territory and the usual conditions of germination have not been studied before. Due to these climatic conditions the fruits of the Shalakh variety are large in size, have a unique taste and prospects for use not only as a food product. Apricot seeds are a source for obtaining the oil, which is used as a cosmetic and medicinal product for sunburn, allergies and has anti-inflammatory and reparative effects. These effects are mainly caused by the unique composition of fatty acids, in particular the high content of unsaturated fatty acids. Probably, fruits should also be characterized by a high content of unsaturated fatty acids.

The aim of this study was to investigate the fatty acid profile and the content of unsaturated fatty acids in the fruits of the apricot variety Shalakh.

The object of the study was dried fruits of the common apricot variety Shalakh, collected and harvested in 2020 in the Armavir region (Armenia). The fatty acid composition of the raw material was determined by gas-liquid chromatography with a flame ionization detector on a Shimadzu GC-2014B chromatograph.

As a result of the study, 6 saturated fatty acids (lauric, myristic, palmitic, stearic, arachinic, behenic) and 5 unsaturated fatty acids (palmitoleic, oleic, vaccenic, linoleic, α -linolenic) were found in apricot fruits. The highest content of these compounds is oleic acid - 40.18% and linoleic acid - 35.10%.

Conclusion. The ratio of unsaturated fatty acids to saturated fatty acids of 4.6:1 suggests that the raw materials of the Shalakh apricot variety can be potential reparative, antioxidant and rejuvenating agents.

Keywords: apricot; Shalakh variety; fatty acids