

International Conference on

ANALYTICAL CHEMISTRY

November 21 - 22, 2018 | Madrid, Spain

Kikalishvili B et al., J Chem Tech App 2018, Volume 2

STUDY OF THE LIPIDS FROM THE FRUITS OF *YUGLANS REGIA L.* GROWING IN GEORGIA

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The aim of the investigation is to study on content of lipids fruits of usual walnut growing in Georgia for the use in medicine, for strengthening medical effect in oncological therapy, also in cosmetology.

Usual walnut - *Juglans regia L.* (Juglandaceae) is widely spread in Georgia. The fruit (kernel) of plant is rich in lipids and various classes (groups) physiologically active compounds: vitamins, fatty acids, flavonoids, sterines, aminoacids. The fruit of walnut and lipids from them is used for treatment of atherosclerosis, cardio-vascular diseases, in the time of liation immunic system, dermatitis, depressy, possesses cholagogic action.

From the fruits of walnut there was isolated the sum of neutral lipids (nl) in ameunt 70%, in which are revealed substances of following classes: hydrocarbons, triglycerides, free fettiy acids, sterines. There were determined some physical-chemical constants of the sum neutral lipids: specific weight $d_{20} - 0,925$; index of refraction $n_{20} - 1,481$; acid number- 1,9mg.KOH; iodine number I-135.

On the following stage of investigation with the help of method high performance liquid chromatography (HPLC) qualitatively and quantitatively there were identified free fatty acids: dodecanic acid - 0,10 mg/%, tetradecanic acid - 0,12 mg/%; hexadecanic acid -4,98mg/%; octadecanic acid - 1,4 mg/%; eicosanic acid - 0,21 mg/%; docosanic acid - 0,15 mg/%; tetracosanic acid -0,10mg/%; 9-octadecenic acid-70mg%; 9,12-octadecadienic acid-18,6 mg/% and 9,12,15-octadecatrienic acid-1,8mg%.

In the polar sum of the fruits of walnut there were revealed four phospholipids: lizophosphatidilcholin Rf-0,25; phosphatidilinosit Rf-0,34; phosphatidilcholin Rf 0,58; phosphatidilethanolamin Rf 0,64.

The sum of neutral lipids walnut from saturated fatty acids dominates hexadecanoic acid, but from unsaturated fatty acids-9-octadetsenic.

By the pharmacologically studies there was established that lipids from the fruits of walnut possess gastro protectoral action.

BIOGRAPHY

Kikalishvili B has completed her PhD at the age of 35 years from I. Kutateladze Institute of Pharmacochimistry (Georgia). She is a principal scientist of TSMU Iovel Kutateladze Institute of Pharmacochimistry. She has published more than 74 publications in reputed journals. She is a member of organizing committee of several international conferences and meetings.

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