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STUDY OF THE LIPIDS FROM THE FRUITS OF *CORYLUS AVELLANA L.*, GROWING IN GEORGIA

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Usual hazel-Coryllus avellana L. (Betulaceae) appropriates to high shrubby plant is widely spread in Georgia. Fruits of the hazel is rich in lipids and biologically active compounds: proteins, vitamins B, C, E, PP; paclitaxel, microelements. Lipids from them is used in medicine: as cholagogic, in time of atherosclerosis, rheumatism, skin, hypertonic diseases, in oncological practice, as medical-prophylactic means.

From the fruits of Usual hazel there was derived lipids in amount 60%. Using the TLC there were established substances of following classes: hydrocarbons, triacylglycerides, free fatty acids, sterines. There were determined some physical-chemical constants of the crude lipids: Acid number-2-3 mg KOH, iodine number I-100-108, index of refraction n-1,460, specific weight d-0,943. On the following stage of the investigation with the help of method high performance liquid chromatography-HPLC were identified ten fatty acids: dodecanic acid-0,10mg/%, tetradodecanic acid-0,10mg/%, hexadecanic acid-5,1 mg/%, octadecanic acid-1,65 mg/%, 9-octadetsenic acid-80,61 mg/%, 9,12-octadecadienic acid-14,28mg/%, 9,12,15-octadecatrienic acid-0,12mg/%, eicosanic acid-0,18mg/%, docosanic acid - 0,10mg/%, tetracosanic acid-0,11mg/%. In the sum of polar lipids there were revealed five phospholipids, lizophosphatidilcholin Rf-0,18, lizophosphatidilaethanolamin Rf-0, 37, phosphatidilchocholin Rf-0, 54, phosphatidilaethanolamine Rf-0, 66, N-acylphosphatidilaethanolamine Rf-0, 86. The sums neutral lipids obtained from the fruits of hazel consist unique ratio of saturated, unsaturated and polyunsaturated fatty acids. In the sum neutral lipids of hazel dominates 9-octadetsenic and 9,12,15-octadecatrienic acids. By the pharmacologically studies there was established that lipids from the fruits of hazel possess gastroprotectoric action.

BIOGRAPHY

Gorgaslidze N has completed her PhD at the age of 37 years from Saint-Petersburg State Chemical-Pharmaceutical Academy, Russia. She is a director of TSMU Iovel Kutateladze Institute of Pharmacochemistry and professor at the department of Social and Clinical Pharmacy at Tbilisi State Medical University. She has published more than 100 papers in reputed journals, the author of 4 books and 2 patens. She is a member of organizing committee of several international conferences and meetings. She has more 40 years of teaching experience at the Tbilisi State Medical University, Georgia. She is founder of the Georgian Pharmaceutical Association (President 2002-2005) and newspaper - "Pharmacy. She is member of scientist and young pharmacists of Georgia. Nana Gorgaslidze has long timework experience in the Ministry of Health, Labor and Social Affairs of Georgia in field of state control of quality medicinal and pharmaceutical products and other departments of the same ministry.

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