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The lipid composition of some plants growing in Georgia

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The aim of this work was to study the lipid composition of the fruit of *Corylus avellana* L. (*Betulaceae*) and seeds of *Persica vulgaris* L. (*Rosaceae*). Using the method of high performance liquid chromatography (HPLC), seven saturated, one mono-unsaturated and two poly-unsaturated fatty acids were identified. It is remarkable that hexadecanoic, 9-octadecenoic acid and 9, 12-octadecadienoic acids are predominant in fatty oil. From the fruits of *Corylus avellana* neutral lipids with a yield of 61%, relative to the air-dry raw material were obtained. Five phospholipids and seven amino acids were identified from the polar lipids of *Corylus avellana*. Fatty oils from the seeds of *Persica vulgaris* (*Rosaceae*) were studied. HPLC analysis of the fatty oils show presence of five saturated, one unsaturated and two poly-unsaturated fatty acids. Among of them dominants are: 9-octadecenoic acid, 9, 12-octadecadienoic and 9,12,15-octadecatrienoic acid, which are not synthesized in the human body and are presented as an irreplaceable fatty acids. The characteristics of the fatty acid composition of the fatty oil of the seeds of *Persica vulgaris* is related to the climatic conditions of the eastern regions of Georgia and corresponds to the tendency of growth of unsaturation with changing environmental factors.

Biography

Nana Gorgaslidze completed her PhD from Saint-Petersburg State Chemical Pharmaceutical Academy, Russia. She is the Director of the Ivel Kutateladze Institute of Pharmacochimistry, Tbilisi State Medical University (TSMU) and Professor at the Department of Social and Clinical Pharmacy at TSMU. She has published more than 94 papers in reputed journals, authored four books and has two patents. 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 the Founder of the Georgian Pharmaceutical Association (President: 2002–2005) and newspaper, Pharmacy. She is a Member of Scientist and Young Pharmacists of Georgia. She has long timework experience at the Ministry of Health, Labor and Social Affairs of Georgia state control of quality medicinal and pharmaceutical products and other departments of the same ministry.

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