

PP58. PHYTOCHEMICAL PROFILE OF ROSA ILIENSIS

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In the present work, three populations of *Rosa iliensis* Chrshan collected from the Sharyn River (P-II), upper (P-II) and lower reaches (P-III) of the Ili River were comprehensively evaluated for phytochemical profile. Carbohydrates, triterpenes, phenolic acids, vitamins and pro-vitamin, and minerals have been determined in the leaf, fruit and seeds of *R. iliensis*. The content of ascorbic acid in fruits and leaves of *R. iliensis* was determined via RP-HPLC. P-II was noted for the highest ascorbic acid content (3.15 mg%). The fruit pulp and seeds were investigated for α -tocopherol and β -carotene contents by using the UltraPerformance Convergence Chromatography (UPC²). The highest α -tocopherol (0.284 mg/mL) and β -carotene (0.363 mg/mL) amounts were found in P-II fruits. The highest content of phenolics was found in methanolic extracts of flower and leaves (>0.4 mg GAE/mL). The extracts obtained with polar solvents demonstrated significant antioxidant activity (IC₅₀ 0.017 and 0.315 mg/mL). In the leaf, -glucopyranose, myo-inositol (vitamin B8), gallic acid, and sucrose were found as the major constituents. In the fruit pulp, β -fructofuranose, α -D-fructofuranose, fructopyranose, α -glucopyranose, β -glucopyranose, myo-inositol (vitamin B8), oleanolic acid and ursolic acid were found as the major constituents. In the seeds, myo-inositol (vitamin B8), quinic acid, gallic acid, and β -sitosterol were detected. The mineral contents (Na, K, Ca, Zn, Pb, Ni, Cd, Fe, Cr, Cu, Ti, and Al) in the fruits were determined with an Inductively Coupled Plasma Optical Emission Spectrometer system. The present study shows that *R. iliensis* species is a rich source of valuable nutraceuticals.

Keywords: *Rosa iliensis*; vitamin; UPC²; HPLC.

Acknowledgements: Authors thanks to Faculty of Pharmacy, Medicinal Plant, Drug and Scientific Research and Application Center (AUBIBAM) of Anadolu University for helping in research work, and to Faculty of Biology and Biotechnology, Al-Farabi Kazakh National University for financial supporting of travel.