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PHENOLIC ACIDS OF SEA BUCKTHORN (*HIPPOPHAË RHAMNOIDES* L.)

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Introduction. Phenolic acids are a large group of biologically active substances which belong to group of phenolic derivatives. Interest in this group of compounds is explained by the large range of biological action, wide distribution in nature, they are from to the classes of practically non-toxic or relatively harmless substances. Most phenolic compounds are antioxidants due to the binding of free radicals and heavy metal ions.

Aim. To carry out analysis of the phenolcarbonic acids of the sea-buckthorn fruit.

Materials and methods. The object of the study was the fruits of the sea buckthorn variety «Solodka zhinka» (zoned in Ukraine, state register No. 98078003).

For setting the thin-layer chromatogram were used the following systems of solvents: butanol – acetic acid – water (BAW) (4:1:2), 2% and 15% acetic acid, ethylacetate – formic acid – water (88:6:6); chromatographics plates «Silufol» number 366, 254 and «PTSH – AF – A – UV»; solution of following reagents: ferum chloride, aluminum chloride and saturated alcohol solution of ferum sulfate. Realiztion of thin-layer chromatogram showed that the plates «PTSH – AF – A – UV» and «Silufol» number 366 have the best division in the system BAW (4:1:2) and ethylacetate – formic acid – water (88:6:6). Then, the system BAW (4:1:2) were choosen for the search of phenolic derivaties. The biggest division was given by a chromatographic plate «PTSH – AF – A – UV». More clean and exact spots in UV and day-light were observed on a plate «Silufol» number 366. Revealing reagents in this case were solutions of aluminum chloride and saturated alcohol solution of ferum sulfate. Solution of aluminum chloride became the best revealing reagent, that in turn, in interaction with phenolic derivaties gave colors in UV and day-light from brightly-green to lemon. But plates under the effect of this reagent were subject to corrosion and did not save the primordial kind. Same effection with his action appeared the saturated alcohol solution of ferum sulfate. In interaction with phenolic derivaties it colored them in dark tones. Identification of phenolic acid were carried out using physico-chemical properties, chromatographic Rf-value and comparing with reference compounds.

Results and discussion. The results of the study indicate that the sea buckthorn variety «Solodka zhinka» fruits contain chlorogenic, caffeic, syringic, coumaric, ferulic, synapic, cinnamomic, quinic acids.

Conclusions. A preliminary chromatography analysis indicates a high content of quinic, chlorogenic and caffeic acids.

THE STUDY OF IRIDOIDS OF THE GENUS *VERONICA* L. CULTIVATED SPECIES

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Introduction. Plants of genus *Veronica* (*Plantaginaceae*) are distributed worldwide, in particular in a territory of Ukraine (up to 70 species), formal species are not. Species of genus *Veronica* L. are widely cultivated in Ukraine as ornamental plants with very beautiful and different inflorescences. Though plants