DETERMINATION OF ASCORBIC ACID CONTENT IN FRUITS AND LEAVES OF BLACK CHOKEBERRY

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Black chokeberry (*Aronia melanocarpa* (Michaux) Elliot) belongs to the apple subfamily (*Maloideae*), the rose family (*Rosaceae* Juss.). It is native to the eastern part of North America. It is widely cultivated as fruit, medicinal and ornamental plant in Ukraine.

Fresh fruits of Black chokeberry are officinal. The principal active substances of Aronia fruits are organic acids (malic, citric, oxalic), carbohydrates, phenolic compounds (phenol carboxylic acids and their derivatives, catechins, anthocyanidins and their glycosides leucoanthocyanidins, flavanols, tannins) and vitamins. They cause hypotensive, spasmolytic, anti-inflammatory, antimicrobial, diuretic and choleretic activities of fruits and they strengthen blood vessels.

Phytochemical research of Black chokeberry leaves has been conducted insufficiently. Previously we studied essential oils, amino acids, macro-and micronutrients, polysaccharides and carboxylic acids of fruits and leaves of this plant.

The goal of the present work was to study content of ascorbic acid from Black chokeberry leaves and fruits that were harvested respectively in May and September 2013 in the botanical garden of the National University of Pharmacy.

Determination of ascorbic acid content in the test raw materials was carried out by the high-efficiency liquid chromatography method on a Shimadzu chromatograph equipped with pump LC-20AD, spectrophotometric detector SPD-20AV and system controller CBM-20 ALITE.

As a result of researches content of ascorbic acid in fresh fruits of Black chokeberry was 0.002% (based on dry raw material), in leaves – 0.0001%.

Pharmacognostic study of fruits and leaves of Black chokeberry will be continued.