- 21. Mamatkulova I.E. "Elwendia Boiss turkumi turlarida efir moyi va antioksidantlik faolligini oʻrganish". Материалы научной конференции проблемы биофизики и биохимии 2023.119 стр. 19 мая 2023 года
- 22. https://www.foodingredientsonline.com/doc/sodium-caseinate-0002#:~:text=American-,Casein%20Company,-%2C%20109%20Elbow%20Lane
- 23. https://www.babyment.com/pregnancycare.php?pregnancy=Formula-Milk-:-What-are-Choline,-Taurine,-Lutein-and-

Nucleotides?#:~:text=murojaat%20qilishingiz%20mumkin.-,Taurin,-va%20uning%20funktsiyalari

MEDICINAL PROPERTIES OF ARONIA

(DSc), prof. Murodova Sayyora Sobirovna, Hamroyeva Firangiz Nematovna, Anvarov Bobur Bakhodirovich

Jizzakh branch of National university of Uzbekistan

Annotation: 10% of chokeberry is sugar, i.e. glucose and fructose, alcohol sorbitol. It gives a sweet taste to food and has the property of significantly reducing the amount of sugar in people with diabetes. Plant fruits are rich in P vitamins. The average amount of antacid pigments in the fruit is 6.4%. Aronia fruit is completely different from other plants due to the fact that its content is rich in trace elements. Its fruit contains boron, fluorine, iodine compounds, iron, copper, manganese, molybdenum compounds. The total alkalinity of its fruit is 1.3% lower than that of an apple. In addition, the aronia fruit contains pectin and flavoring agents, as well as glycoside amegdalin. Aronia fruit is the most antioxidant-rich fruit among medicinal plants. With this feature, it belongs to the ranks of anti-aging products. The abundance of mineral substances, vitamins and biologically active substances in the aronia fruit is the cause of great interest in the study of its biochemical composition.

Key words: Aronia, medicine, fructose, vitamin, sorbitol, diabetes.

Aronia (Aronia melanicarpa) is a small bush or tree about 1.5 meters high, the leaves are somewhat reminiscent of cherry leaves. Aronia is often grown as an ornamental and fruit plant, as well as medicinally by amateur gardeners, summer residents and specialized farms. Aronia berries have a pleasant sour-sweet taste. Aronia is a real storehouse of useful substances. It contains a natural complex rich in vitamins (P, C, E, K, B1, B2, B6, beta-carotene), macro and microelements (boron, iron, manganese, copper, molybdenum, fluorine), sugar (glucose) (sucrose, fructose) pectin and tannins. Aronia fruits contain 2 times more vitamin P than blackcurrants and 20 times more than oranges and apples[1]. It is worth noting that aronia leaves contain less useful components than its fruits. However, they contain substances such as rutin and hyperoside. These substances are geroprotectors necessary for health and longevity. Raw aronia also contains quercetin, a powerful antioxidant. It is not recommended to use decoction of aronia leaves for heart

diseases, increased blood clotting (thrombophlebitis, varicose veins), as well as increased acidity of the stomach and diarrhea[2]. It is recommended as a diuretic for diabetes, especially capillary lesions, thyroid diseases, kidney diseases, allergies, scarlet fever, typhus. Aronia is used as antispasmodic, vasodilator, hemostatic, hematopoietic, appetizing, choleretic and diuretic[3]. Due to the high content of biologically active substances of iodine and vitamins in black chokeberry, its juices can be used to prevent and treat iodine deficiency and vascular diseases. Black chokeberry is rich in biologically active substances, so its dry fruits can be used as a biologically active additive in the bread industry and confectionery industry. Also, it is recommended to propagate aronia plantations in the pharmaceutical industry by the pen method and to use two-year branches. [4]

In medicine, chokeberry fruit is used to prevent and treat cardiovascular, liver, thyroid, metabolic syndromes, diabetes, hypertension, and gastrointestinal diseases. Cultivated species are cultivated as food, ornamental and medicinal plants. For this reason, it is important to study methods of cultivation and reproduction of this plant in Uzbekistan.

References:

- 1. Baxodir o'g'li A. B. et al. In Vitro sharoitida maxsulot ishlab chiqarish texnologiyasi //International Journal of Contemporary Scientific and Technical Research. 2022. C. 569-571.
- 2. BAXODIR OʻGʻLi A. B. ., Ergashevna M. I., Iskandarovich O. R. A. Bioyoqilg ʻilarni sanoatda olish texnologiyasi va ularning imkoniyatlari //Endless light in science. 2022. №. декабрь. С. 150-154.
- 3. Baxodir oʻgʻli A. B. et al. Oddiy kanakunjut (ricinus communis 1) oʻsimligining ahamiyati va agrotexnologiyasi //Scientific Impulse. $-2022. -T.1. N_{\odot}$. 5. -C. 1605-1609.
- 4. Baxodir oʻgʻli A. B., Iskandarovich O. A., Abduvaliyevich M. M. Amarant (Amaranthus) ning-botanik tasnifi va dorivorlik xususiyati //so ʻngi ilmiy tadqiqotlar nazariyasi. − 2022. − T. 1. − №. 1. − C. 336-337.
 - 5. https://yandex.ru/turbo/edaplus.info/s/produce/chokeberry.html?lite=1
- 6. https://rskrf.ru/tips/eksperty-obyasnyayut/polza-i-vred-chernoplodnoy-ryabiny/
 - 7. https://edaplus-info.turbopages.org/edaplus.info/s/produce/chokeberry.html
 - 8. https://www.samdu.uz/uz/news/30248

АНТИОКСИДАНТЫ В ПРОФИЛАКТИКЕ КОГНИТИВНЫХ НАРУШЕНИЙ ПРИ САХАРНОМ ДИАБЕТЕ

Мустафакулов М.А.

Джизакский филиал Национального университета Узбекистана mmustafakulov@bk.ru

Актуальность: Стимуляция антиоксидантной защиты снижает риск развития когнитивных нарушений, связанных с гипогликемией.