Perspective for studying of sea buckthorn zoned in Ukraine Natalia V. Popova, Lybov. S. Naumenko, Larysa. A. Bobritskaya

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Sea buckthorn is an important medicinal plant. Sufficient amount of researches is devoted to sea buckthorn in phytochemistry, technology for creating drugs, dietary saplements, cosmetics and food products. Recently, the assortment of sea buckthorn herbal drugs has expanded, in various industries not only fresh and dried fruits are used (to produce sea buckthorn juice and oil), but also leaves, bark and buds.

A number of types of biological activity for herbal drugs and preparations have been established: sea buckthorn oil and medicines which containing it are used as anti-inflammatory agents and that improve regeneration with radiation damage of the skin and mucous membranes, colpitis, cervical erosion, endocervicitis. Sea buckthorn oil use internally for the complex treatment of gastric and duodenal ulcers. It is also included in the number of drugs ("Olazol", "Oblekol", "Hypozol").

Sea buckthorn fruit juice has antibacterial, biostimulating (for growth of enzymes of the stomach and body) and antitoxic effects. Fruits contain flavonoids, tannins, organic, hydroxycinnamic, aminoacids and carotenoids. The sea buckthorn buds contain flavonoids, tannins and alkaloids (trace amounts). Tannin from the leaves have astringent and anti-inflammatory effects.

The bark contains serotonin, which has a positive effect on the functioning of the nervous system. Coumarin from the leaves has an antispasmodic effect.

Leaves contained inositol with antiarrhythmic effect, and phytoncides exhibit antimicrobial activity, flavonoids reduce the risk of cancer. Folic acid of fruits has a beneficial effect on the immune system.

Oleic, ursolic and other triterpenic acids produce antiviral effects. The fruits are rich in vitamins B, C and PP. Fruits and leaves contain beneficial minerals, such as potassium, calcium, manganese, iron, boron, which increases the biological significance of herbal drugs.

In Ukraine, the following sea buckthorn varieties are zoned in significant areas: Augustine, Elizaveta, Essel, Gigantic, Solnechnaya, Altai, Podruzhskaya, Botanical, Moscow Beauty, Chui, Favorite, Nivelen, Golden Ear, Trofimovskaya, Botanical Amateur, Katuni Gift.

Pharmacopoeial monographs have been developed in a number of countries for the standardization of sea buckthorn plant herbal drugs (fruit, oil). At the same time are not still developed standardization and identification of possible falsifications and admixtures of drugs and dietary saplements based for various variety of sea-buckthorn in Ukraine.

There are a lot of types of technology of production of sea buckthorn drugs, which require improvement. Therefore, pharmacognostic, phytochemical, technological studies of sea buckthorn varieties in Ukraine, are relevant.

Literature:

- 1. Gergel E. M. Pharmacognostic study of some representatives of the stirps Elaegnaceae of Ukrainian flora and the receipt of medicinal substances on their basis. Abstract theses of the candidate of pharmaceutical sciences Zaporizhzhya, 2014 –21.
- 2. Kukina T.P., Shcherbakov D.N,. Gensh K.V., Tulysheva E.A., Salnikova O.I., Gragdannikov A.E, Kolosova E.A. Bioactive components of sea buckthorn greenery // Chemistry of vegetable raw materials. 2016. №1. P. 37-42.