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KINTRODUCTION OF ZIZIPHUS JUJUBA MILL., PLANT IN THE CONDITIONS OF THE REPUBLIC OF KARAKALPAKSTAN(Introduction of Ziziphus Jujuba Mill., (Unabi) in the Conditions of the Republic of Karakalpakstan)

Azilova Ulbolsin Tureniaz qizi
Nukus State Pedagogical Institute named after Ajiniyaz Botany, ecology and it o`Doctoral student of the Department of Teaching Methodology
Ajiev Alisher Bakhtibaevich
Nukus State Pedagogical Institute named after Ajiniyoz, biological sciences`Doctor of Science (DSc)

SUMMARY. In the article, the goal and task of introducing Ziziphus jujuba Mill., to the Republic of Karakalpakstan, the economic importance of its cultivation, and the methods of cultivation in field conditions were analyzed. Many medicinal properties of unabi fruit have been mentioned.
Keywords:unabi, jujube jujube, introduction, unabi, flora, anemia, pulp, choylon, asthma, smallpox, hypertension.

Today negative to the plant world effects co`The bioecological features of the flora of the Republic of Karakalpakstan were scientifically studied in the period under review`learning, human xo`It is useful for the activities of the Jalik`plants, including Ziziphus jujuba Mill`scientific application of plant species, o`learning is an urgent task.

Taking into account the conditions of the Republic of Karakalpakstan, we will reduce the negative impact of sand, salt and dust particles rising from the Aral Bay region by introducing promising species of chilongjiida. O`Decision of the President of the Republic of Uzbekistan No. PF-5303 dated January 16, 2018 "On measures to further ensure food security of the country" and Decision No. 545 of the Cabinet of Ministers of the Republic of Uzbekistan dated August 27, 2021 09/21 /545 /0832 Lemon suitable for the soil and climate conditions of the republic, unabi and to accelerate selection work on the creation of new productive, disease-resistant, and exportable walnut varieties, to improve cultivation technology, and to ensure that scientific projects involving the introduction of new varieties into practice are introduced in the prescribed manner by applying unabi (unabi) varieties in Karakalpag It is intended to be planted as a promising plant for degraded lands in the Republic of Estonia [1-2-3].

Level of study of the problem. The introduction of Ziziphus jujuba Mill., (unabi) plant in the conditions of Central Asia and Uzbekistan has been studied by a number of scientists for many years. In particular, the initial studies in this regard E.T. Akhmedov, E.T. Berdiev, S.A. Ostroukhova, L.V. Ponomarenko, A.V. Ryndin, L.T. Tashmatovs say that this crop is planted in Central Asian countries, including Uzbekistan, Tajikistan and Turkmenistan, although in small quantities, and the first scientific research works were carried out in the middle of the last century. However, the wild species of unabi have been found in these areas for a long time, mainly growing as a bush with thorns or a tree with a height of 4-9 m [4;6-97-6]; [pp. 5, 32, 33]; [6; 15; p. 95]. In the CIS countries, it is noted that this crop bears early fruit, is resistant to drought, does not adapt to soil conditions, and has not only food, but also medicinal and decorative value. AP Dragatsev (1966), VA Kolesnikov (1973), VV Vorontsov, UG Shteiman (1982), AD Mikeladze (1988) and others, unabi fruits contain up to 30% dry matter, mainly sugar (21-25%), acids (0, 47-1.87%) indicated the presence. Fruits are rich in vitamin C (from 350 to 735 mg%), pectin substances (2.1-5.8 mg%), as well as vitamin P substances (25-100 mg%). Therefore, they are valuable not only as a food product, but also as a medicinal product. Fruits are consumed in raw and dry form, as well as additives in the production of preserves. According to RE Loiko (2003), pulp contains 17-76% dry matter. Carbohydrate content varies from 14.5 to 27.5% depending on the growing area. Fruits contain from 1.7% to 3% organic acids (malic, succinic and zipinic). Fruits contain 1.2-1.6% protein, 0.1-0.3% fat, 0.6-1.4% fiber[7].

Botanical description of Chilonjiyda. Chilonjii (unabi) is a thorny tree belonging to the Rhamnaceae family, 2-5 m tall, with branches growing in all directions. Young branches are covered with hairs. The leaves are elongated ovate, the upper side is slightly elongated, the plates are asymmetrical, with large veins, and are arranged in a row on the stem and branches with the help of a short band. The length of the leaf plate is 3.5-4 cm, the width is 1.5-2 cm, the edges are toothed, the upper side is hairless, shiny, the color is green, the lower side is light green, the veins are covered with hair. the leaf band is sparsely hairy, the small greenish flowers are located in a semi-umbrella inflorescence growing from the leaf axils. the fruit is spherical or oblong, orange-red, small (about 1.3 cm long, 1.2 cm wide) with little juice, the soft part is drier, the taste is sour-sweet [8; p. 15-95]; [9; p. 3-22]. The fruit is reddish-brown in color, oblong, large, pointed and hard. 25-30% of the fruit blooms in May-June, the fruit ripens in September-October. The flowers are star-shaped, greenish-yellow, fragrant, small 0.3-0.4 cm in diameter, bisexual, located in short panicles [10; p. 43-68]; [11; p. 225-226 [12; p. 12-54].

The seeds of the unabi fruit are elongated, both ends are sharp, and the seeds are very hard. Due to the presence of different substances (inhibitors) that prevent germination, most seeds do not germinate. it is necessary to stratify them by creating the observed conditions.

To carry out the research work, the seed quality was first checked according to international requirements. Seeds were collected in Petri dishes on filter paper at a temperature of +220 C for 14 days (Fig. 1). Seed germination was studied by dividing into germinated, hard and rotten parts.

At home, Ziziphus jujuba Mill. can be planted from seeds and as seedlings in early spring. Before sowing, the outer hard shell of the seeds is removed, which helps the seeds to germinate quickly. The number of seeds can sometimes be two. The seed usually germinates within 1 week at +23°C. Chilonjii (unabi) kochats can be transplanted.

a) b) c) d)

Figure 1. a) seeds of chilonjiyd, b) budding phase, c) planting process, d) sprouted lawns.

Several varieties of Ziziphus jujuba Mill., Ta-yan-tsao, U-sin-hun and Melkoplodnyy kislyy #1 were selected as research objects. Seedlings of these varieties were obtained from Academician M. Mirzayev Scientific Research Institute of Horticulture, Viticulture and Winemaking, and the Research Center of the Department of Fruit, Viticulture and Vegetable Growing of Samarkand State University.

Research work is being carried out in the Republic of Karakalpakstan in the city of Nukus and at the pilot site of the Orolboyi International Innovation Center. The plant varieties were planted in the experimental fields in the second decade of April, with a row length of 2m and a width of 3m. The species of the plant varieties was determined using the "Information system FLORUZ" (2013) developed by the Central Herbarium of the Research Institute "Botany" of the UzFA. All agrotechnical processes carried out in the experimental fields were carried out on the basis of methods widely used in this region and taking into account the biological characteristics of the studied plants.

Phenological observations are being made on the growth and development of the plant. In the field experiments, plants were placed in 5 rows, and a total of 27 plants were observed from 3 plots in an envelope method (Fig. 2).

abcd

Figure 2. Experimental field of Chilonjiida plant (a-biennial seedling, b-flowering phase, c-raw fruit, d-ripe fruit)

2-year-old cuttings of the Chilonjiyda plant were planted on the experimental field on April 10, 2024. Fertility is high in the saline soil conditions of the Republic of Karakalpakstan. The average length, number and length of the leaves were calculated every 3-4 days from the vegetation period to the generative period. The medicinal properties of Ziziphus jujuba Mill. are highly valued.

The inhabitants of the mountainous regions of Central Asia emphasize that the fruit of chilongji is used to make porridge, mix it into the dough for baking bread, and improve its taste. In folk medicine, all parts of chilongjiida are used: leaves, fruits, roots. In order to raise the tone of the body and increase the resistance to infectious diseases, the inhabitants of the mountainous regions consume half a cup of the tincture of the leaves called "choylon" on an empty stomach in the morning [13]. A decoction made from the fruit of Chilonjiydi is recommended as a cough, hypertension, asthma, smallpox, anemia (anemia), delaying diarrhea, pain reliever, and blood pressure lowering agent. In the research conducted by the Korean scientist Choi Chesop, 27 of 63 people who suffered from hypertension (42%) who were treated with a decoction of autumn leaves of chilongjiida completely recovered, and 29 (46%) improved their health. [14]. It is a requirement of the present time to thoroughly study the ways of their adaptation to new conditions by introducing chilongjid species to the territory of our republic, and to select high-yielding forms and develop technologies for their cultivation.

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