



## THE IMPORTANCE OF CHAKANDA PLANT IN MEDICINE AND FOLK MEDICINE IN THE WORKS OF IBN SINA

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<b>Received:</b> 26 <sup>th</sup> May 2021 <b>Accepted:</b> 7 <sup>th</sup> June 2021 <b>Published:</b> 12 <sup>th</sup> July 2021	This article describes the medicinal herbs chakanda found in the works of Abu Ali ibn Sino. Its botanical description, the distributed range, the bioecological and healing properties. The herbs contains carotene, promotes the development of the human embryo, good pregnancy and the overall state and growth of the human being. The plant also uses infectious diseases. Corrects the wounds after heavy surgical procedures, and elicits blood vessels. The presence of sufficient amount of tocopherol in the normal state of the heart. The use of prophylactic medicinal plants to help people get healthy.

**Keywords:** Carotene, flora, population, bark, tocopherol, aeration, substrate.

Healing plants are known to mankind from the past. Our ancestors came from ancient times to seek the healing of diseases from nature, using it wisely. Specifically, our compatriot scientist Abu Ali Ibn Sina has written in his works valuable information about more than 900 medicinal plants that these data have not lost their value even today. More than 100 species of medicinal plants belonging to the flora of Surkhon, whose names are mentioned in the works of Ibn Sina, are widely used today in medicine, pharmaceuticals and folk medicine. One such medicinal plant is the Chakanda (*Hippophae rhamnoides* L.) plant, which belongs to the family of Elaeagnaceae Juss..

The medicinal properties of the round-headed retailer, which is distributed in the Boysun, Kentala regions and the Topalang river basin of Surkhandarya region, have been studied in detail. In the literature, there are 3 species belonging to this category, among which the most common and valuable medicinal properties are the spider mite. The other 2 species are deciduous and Tibetan reptiles are found in Nepal, Bhutan and in the Tibetan plateau at altitudes of 1800-4200 m. In the wild, it grows as a thorny shrub or a small tree 6-8 m tall. Chakanda is a tugai plant and constantly grows in river basins, valleys, where groundwater is close to the soil surface, forming thick chakanda. In the MDX countries, the retailer has formed populations that differ from each other in terms of several biological and morphological features. Among them, the Siberian population covers the valuable Baikal and Sayan-Altai mountainous areas, on the basis of which many cervitamine, thornless and large-fruited varieties have been created. In our country, retail is found in almost all mountain river basins, but its compact shrubs are located in the middle reaches of the Zarafshan River and its left tributary, the Karadarya basin.

In the Zarafshan river valley, it has formed plant formations such as chakanda jiyda-chakanda, tol-jiyda chakanda, taza chakanda, chakanda grass plants, in these formations it is often involved as an edificative plant. There are 50-55 tons of retail biological fruit reserves in 370 hectares of tugai forests in Zarafshan Nature Reserve. Retail shrubs of industrial importance (150 ha) are found in the tugai forests of the Karadarya basin (left tributary of the Zarafshan) in the Samarkand region from the Daxbed fortress to the Juma fortress. There are 12 bushes in the Topalang river basin and 20 ha in the Aksuv river basin. The bark is dark gray, the branches are greenish-silver in spring, and at the end of the growing season they turn gray-brown. The leaves are slender, lanceolate, 2-9 cm long and 3-15 mm wide, the upper part is gray-green, the lower part is silvery. The flowers are opposite-sexed, developing simultaneously with the development of leaf buds. It blooms in April-May. Retail-two-house and wind-pollinated plant. Maternal (seed) pollen develops separately from paternal (pollen) pollen. The flowers are tubular. The rod buds of the pollen (paternal) plant are 2-3 times larger than the buds of the seed (maternal) plant, collected in silvery-brown short spikes and covered with coins.

Seed flowers are yellowish, stand alone in the axils of leaves. If pollinating trees or shrubs have flowers collected in small petals, the pistil flowers are placed in the leaf axils of the seed tree or shrub branch. The flower buds are covered with coins, which reliably protect the flower parts from the spring frosts, so the retailer produces an abundant harvest every year, despite various weather whims.

Retail fruits ripen in August-September and are stored in the bush until late autumn-early winter. The retail fruit has a fragrant aroma reminiscent of berries, juicy, pineapple, and a sour-sweet taste. The fruits are spherical-round, oblong-oval, barrel-shaped and cylindrical, light yellow, fiery and reddish in color. The fruits are formed mainly on 1-2-year-old twigs and cover the twig completely, its Russian name *oblepixa* is derived from the combination of the words "obleplyayushchie vetvi".

Retail comes into fruition after 4-6 years in nature, this period can be reduced if cultivated under cultural conditions. It is observed that the yield of a retail bush is around 3-8 kg. The fruits are 5-11 mm long, 3-8 mm in diameter, weigh 0.1-0.7 g and are located on the branches in the form of small clusters through a short fruit band.

Retail belongs to the category of light-loving plants. For this reason, sand, alluvial deposits, and gravel on river and lake shores in river valleys are among the first to grow in compacted soil structures of varying degrees. At the same time, these substrates have natural drainage and have a light mechanical composition and aeration. In such places, the *chakanda* grows rapidly from the underground horizontal rhizomes and forms new young plants, usually around the pollinator (paternal) bush only pollinator plants, around the pollinator (mother) bush there are seeders. A characteristic feature of the wild *chakan* is the presence of long thorns on the branches. The phenomenon of "mycorrhiza", which is characteristic of members of the *Jiyadash* family, is also observed in retail. The root system of the *chakanda* plant contains tubular bacteria that assimilate nitrogen from the air, which, like legumes, enriches the soil with nitrogen and allows the *chakanda* to grow and produce abundantly even in low-yielding sandy-gravel soils.

Many vitamins and biologically active substances are found in this plant. Retail contains provitamin A. The development of the human embryo from the absence of this vitamin tube depends on the growth and condition of the person in general. It is also used in retail against infectious diseases. Vitamin E - tocopherol is found in retail. Under the influence of this vitamin slows down the aging process, activates the heart and many internal organs. Resistant to diseases of the respiratory system and stomach. This plant contains fatty acids - linoleic and linolenic, which are important for the human body, biooxidants.

Retail oil also contains vitamins E, K, provitamin A, fatty residues contain substances of a stearic nature - cytosterols, phospholipids, choline, carotene and others. Retail contains large amounts of vitamin E. Vitamins A, C, B<sub>1</sub>, B<sub>2</sub>, B<sub>6</sub>, KK, are found in the fruit juice of the retailer. The amount of ascorbic acid is 37-268 mg / 100 g found in fruit. Retail fruits also contain amino acids, such as alanine, phenylalanine, glutamine, cysteine, leucine, lysine, arginine, serine, valine and others. Essential oils, micro- and macronutrients are also found in fruits. Retail fruits contain 15 trace elements, including iron, magnesium, manganese, copper, barium, sulfur, chlorine, aluminum, silicon and others. In addition, 8% fat is found in fruits, which is why it is a very good immunomodulator and immunoprotector. The presence of beta-carotene (provitamin A) in the retail helps the development of the human embryo, the pregnancy goes well, the general condition and growth of the person is good. It is also used in retail against infectious diseases. Heals wounds quickly after major surgery, making blood vessels elastic. Adequate amounts of tocopherols normalize the heart. Prophylactic consumption of retail products helps people stay healthy.

In short, the consumption of *Chakanda* (*Hippophae rhamnoides* L.) and products made from it, mentioned in the works of Abu Ali ibn Sina, has a positive effect on human health and allows the human immune system to function, to maintain a normal vitamin complex in the body.

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