



SOME MEDICINAL PLANTS BELONGING TO THE AMARANTH FAMILY

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Abstract

This article talks about medicinal plants belonging to the amaranth family and the importance of these plants in maintaining human health.

Keywords. Salsolin, spasm, hypertension, oblepikha, cancer.

Introduction

Our country is extremely rich in the world of useful plants, including members of the amaranth family. The amaranth family includes herbs, semi-shrubs, shrubs, and sometimes trees. Mainly distributed in tropical and subtropical regions of America and Africa, Asia and Australia, partly in warmer regions of Europe. The leaves are simple, sideless, alternate or opposite on the stem. The flowers are single, arranged in more symmetrical inflorescences, the inconspicuous inflorescence is simple - cup-shaped, bisexual, sometimes unisexual (2-eyed). Each flower has a sepal and a pair of sepals at the base. Calyx leaves are mostly 4-5 (1-3), sometimes without a calyx, free, sometimes partially joined at the base, stamens 5, free or joined at the base to form a short tube. Stamens are 4-celled (in anthers), 2-celled (in gomphs). Gynoecium consists of 2-3 fruiting leaves, the node is upper. The fruit is a nut, sometimes a berry, the seeds are spherical, lenticular and shiny. There are 3 families of Gultajikhorozdoshchas: Dcrringiyadoshchas, Gultajkhorozdoshchas and Gomphrenadoshchas. They include 65 genera and more than 900 species. 1 family and 10 types of csa grow in Uzbekistan. Among them, Dcrringiyadoshchacha is the simplest and oldest according to its structure. It has 5 species, but none of them can be found wild in Uzbekistan. Only Cclosia cristata is grown as an ornamental plant in flower beds. Chrysanthemums are the central and species-rich subfamily of the family. 10 of its 50 species belonging to the Amaranthus family are distributed in our country. Among them, sedum (*A. blitum*), machin (*A. retroflus*) are widespread as weeds. Their seed yield is very high, one bush produces 500,000-1,000,000 seeds, and sometimes it causes great damage to irrigated crops. Red tail machin (*A. caudatus*) is planted as an ornamental plant in flower beds, its height reaches 1.0-1.5 m, it is gray and reddish. The ball is red, furrowed. Sometimes wild bushes are found in oases. The homeland of most of the species found in Uzbekistan is America, and they were brought to Central Asia for various reasons at different times and became local. According to its origin and structure, the family of Gultajikhorozads is very close to Shoradozads (*Chenopodiaceae*), and has many common



features with Mingguldozads (Phytolaccaceae). It is considered that Shorodosh and Gultajikhorozdosh originated from the higher structure representatives of Mingguldozad [1].

Systematics of the amaranth family:

Division: Angiosperms - Magnoliophyta

Class: Dicotyledons - Magnoliopsida

Class: Carnations - Caryophyllidae

Family: Carnations — Caryophyllales

Family: Amaranthaceae - Amaranthaceae [5,6]

Circassian plant is a tall shrub or tree belonging to the Amaranthaceae family. The bark is light gray and the spreading branches are cream-colored. The leaves are cylindrical, consecutive, 40-80 mm long, almost threadlike, the tip is short-sharpened, and the place where it joins the stem is widened. The flowers consist of a simple five-petalled stipule, straight, mostly located in the corners of the upper leaves, a little longer than the ovate stipules, the stipule leaves are large-winged in fruit, pink at first, then colorless. The fruit is a one-seeded, rounded, winged nut. It blooms from May to October and bears fruit in July-August.

Application: preparations made from this plant have hypotensive, sedative, vasodilating and pain-relieving properties. Salsolin and salsolidin are used to treat hypertension, headache and spasm of cerebral vessels. Salsolin has a calming effect. Salsolidin also has the same effect, but 3 times weaker than Salsolin. Recently, in the treatment of hypertension, salsolin and salsolidin substances in a ratio of 1/5 to 70% alcohol have been used to treat high blood pressure, headache, dizziness, and pain in the heart caused by nerves [2,3].

Amaranth - *Amaranthus* belongs to amaranth family - Amaranthaceae.

It is a one-year herb growing to 2-3 meters in height. The thickness of the stem is 8-10 cm, the leaf is long and elliptical, and is located in a row with a long band on the stem. The flowers are small, inconspicuous, and form a broom-like flower cluster up to half a meter long. The seed is small spherical, brown or yellow in color, and the weight of 1000 seeds is 0.4-0.6 g. One plant can produce up to 0.5 to 45 kg of seeds. The bottom of the seed is shiny. It blooms in June, the seeds ripen in July.

Application: Amaranth oil has the properties of treating stomach and intestinal ulcers, it is used for skin diseases, to accelerate the healing of cut wounds, and for the treatment of patients suffering from light disease. Its oil is not inferior to oblepikha oil, and therefore it is used in the treatment of a number of diseases. In medicine, amaranth seeds help to prevent the growth and absorption of malignant tumors caused by cancer [4].

Today, it is necessary to support the effective work of pedagogues at all stages of education, to expand the scope and increase the practical importance of scientific and research work, to strengthen relations with the international community, to introduce modern teaching methods into the educational process, to train talented students. great attention is paid to the selection of students, preparation of competitive specialists for the labor market, development of scientific research and innovations, and orientation to practical results.



In this regard, the President of the Republic of Uzbekistan "On measures to increase the quality of education in the field of mathematics and develop scientific research" (May 7, 2020, PQ-4708) and "Increasing the quality of education in the field of physics" and on measures to develop scientific research" (March 19, 2021, PQ-5032) Decisions were adopted. Taking this into account, a number of scientific researches are currently being carried out on the integration of specific sciences [7-8]. In turn, the current development of the fields of science, technology, production and technology determines the image of modern society. One of the most important characteristics of modern society is its globalization in all spheres.

References

- [1]. O'. Pratorov., L. Shamsualiyeva., E. Sulaymonov and etc. Botany. Tashkent. 2010.
- [2]. O.K. Xojimatov., X.Q. Haydarov., D.T. Xamraeva., and etc. Atlas of medicinal plants of Uzbekistan. Samarkand. SamDU, 2021.
- [3]. M.A.Jo'rayeva. Atlas of medicinal plants. Tashkent. Noshir. 2019
- [4]. Ahmedov O', Ergashev.A, Abzalov A. and etc. Technology and ecology of growing medicinal plants.Tashkent. 2018.
- [5]. O'.Pratorov., L.Shamsuvaliyeva., E.Sulaymonov and etc. Botany. Tashkent. 2010.
- [6]. I.Tog'ayev. Practical exercises on systematics of higher plants. Namangan. 2015.
- [7]. Расулов Х.Р., Раупова М.Х. Роль математики в биологических науках // Проблемы педагогики, № 53:2. 2021.
- [8]. Расулов Х.Р., Раупова М.Х. Математические модели и законы в биологии // Scientific progress, 2:2. 2021.