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## The varieties of the amaranth and its unique properties

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### Abstract

There are a lot of unique medicinal plants in our country and one of them is the amaranth. There is no one who does not know that the plant amaranth. However, many people do not know its unique healing properties that protect human body.

**Keywords:** amaranth, vegetable, productive, variety, hybrid, stem, foliage, nutrient

### Introduction

In recent years a wide range of measures have been implemented in our republic to ensure food security of the population, to meet the full demand for vegetables and to expand the range of vegetables.

As a result, in the past years the new non- traditional vegetable crops have been introducing for our people.

However, high – yield varieties and hybrids of non –traditional vegetables species such as the newly introduced amaranth is not selected and there is not insufficient attention to scientific research on cultivation technology.

The strategy of action of the republic of Uzbekistan for 2017-2021 defines one of the most important strategic objectives on “optimization of crop content and crop field in agriculture, implementation advance technologies and raising productivity, increase fruit- vegetable and grape production <sup>[1]</sup>.

There are a lot of rare medicinal plants and one of them is the amaranth plant.  
(Look at the picture)



**Fig 1:** There is nobody in our country who does not know the amaranth plant.

However, many people are unaware of its unique healing properties that protect the human body.

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Amaranthus is a family of amaranthus, with more than sixty species. It is native to South America, and has been producing for over 800 years.

The amaranth has been spread from South America to North America and after that to India as well as all over Asian countries. Currently, India and China and are considered the second native land of the amaranth due to having a number of various types of it. The amaranth is used widely in local medicine as well as in the national cuisine and industry <sup>[2]</sup>.

The amaranth flower is small inflorescences pink, dark pink, auburn, red, and purple and as it looks the crown of the cock is known as the amaranth Amaranthus (amaranth) is a perennial plant and has been produced as vegetable (Amaranthus ganeticus, Amaranthus mangostanus), cereal (Amaranthus caudatus, Amaranthus paniculatus), ornamental (Amaranthus blitum) and feed crops <sup>[3]</sup>.

The most valuable and healing part of amaranth are its seeds.

One hundred grams of amaranth seed contain 370 calories and 7 grams of lipids, 4 mg of sodium, 508 mg of potassium, 65 mg of carbohydrates, 1,7 mg of sugar, 14 mg of protein, 159 mg of calcium, 4,2 mg of vitamin C, 7,6 mg of iron, 248 mg of magnesium, 0,6mg of vitamin B6 and other vitamins.

The amaranth oil content does not contain cholesterol.

The amaranth seeds are used to cure the following diseases, including;

Respiratory diseases (Bronchitis, laryngitis, pleurisy, pneumonia)

- Endocrine correction (Anemia, avitaminosis, obesity, diabetes, thyroid diseases)
- Bone and vascular diseases (Osteochondrosis, arthrosis, arthritis);
- Oncological diseases
- It is used in breast feeding of young children and in the treatment of insomnia and other sexual diseases <sup>[4]</sup>.

The amaranth seed is very small and weighs 0, 7 grams per 1,000 seeds.

The colour of the seeds may be white, creamy, brown, gray and black Vegetation amaranth is distinguished from other species by its stem and colorful foliage relatively elegant with its original scenery.

Mainly stem and vitamin-rich leaves are consumed. Vegetable amaranth is very common in eastern countries and is included in daily diet as green vegetables. Besides of medicine its seeds are widely used in various fields of confectionery. Cereal and vegetable amaranth (seeds) is mixed with sweet corn seeds and cooked porridge in India, Pakistan, Nepal and China. As a fodder, the tall stem of 1.5-2 m varieties are planted. The amaranth protein is better saturated with amino acids than other feed crops.

According to experts, the amount of amaranth protein is 75 units as quality scale. The plant grows well in salinity, arid and foothill areas. The standard of sowing of amaranth seeds is 0,5-1,5kg per hectare and the depth of planting is 1-1,5cm.

When the care is properly conducted, an average of 100c. of green stem and 30c. of grain can be harvested per ha. The amaranth is harvested for the green mass during flowering and waxing period. Because during this time the plant's foliage and stem are rich in vitamins. Depending on the

environmental conditions, it is possible to get a number of harvests during the growing season.

When the protein in the seeds is absorbed into the body, it is easily digested, meaning that it is nutritious. In our republic the amaranth is grown only as an ornamental crop.

The main reason for this is the fact that its long-cherished blossoms retain their attractiveness for a long time, their resistance to external influences and their ability to survive for many months without water. Perhaps for this feature it is also called amaranth- the immortal flower. Although, the medicinal properties of plants have not been adequately studied and scientifically justified by the medical staff of our republic, there is information on its wide use in ancient national medicine. Abu Ali Ibn Sina used the amaranth for the healing of wounds and ulcers, skin diseases, (measles, rubella) a foul smell in the mouth cavity and other diseases. At the plant science research institute of India, Cameroon, China, Germany, America, France, Bolivia, Mexico, Tanzania, Tajikistan, the amaranth and local varieties are being studied by its seeds and farm valuable traits.

Each of amaranth samples has their peculiarities. The germination period is 100-140 days. These samples are a valuable resource for various aspects of selection and are implemented for selection purposes. Seeds of amaranth are planted at a depth of 1-1.5 cm at a temperature of 10-12 degrees. It is desirable to prepare seedlings before planting of scenery amaranth samples and then plant them in a permanent place. The best results are achieved when feeding 0.5-1kg seeds per 1 ha

## References

1. The decree of the president of the Republic of Uzbekistan PD- 4947 dated on February 7, about Strategy of actions on the development of the Republic, 2017.
2. Ahmed-Zade AA, Mamadov NA. Essential oil of the amaranth scarlet. // The amaranth: agro ecology, processing, usage. The second final conference of the young scientists and specialties. Kazan, 1991, 38-39.
3. Jeleznova NB, Solonenko LP, Jeleznov AB. The problems of introduction and selection of amaranth. The materials of workshop The amaranth in Siberia. Problems and perspectives Pub. house Tomsk university. Tomsk. 1992, 5-8.
4. Konokov PF, Pavlov LV, Pivovarov VF, Gins VK, Panfilov AG, Vasilevskaya EV *et al.* Methodical instruction on mechanized technology cultivation of amaranth. Moscow. 1999, 20.